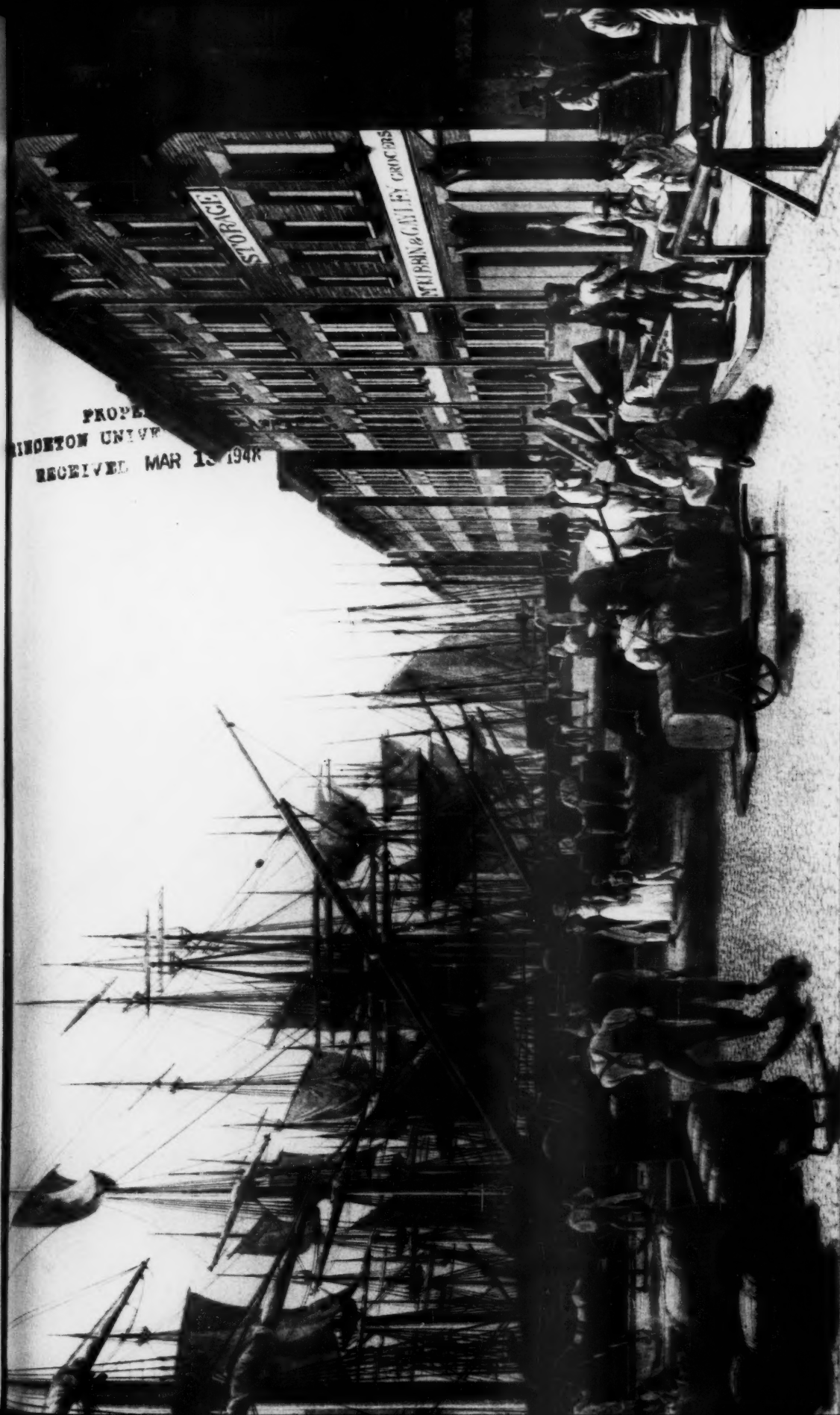


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DUN'S REVIEW

PR

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The mark to be found in every sheet of Crane's Paper likewise carries a message—a message of quality and craftsmanship, of the use of cotton and linen fibres only in the making of paper these 146 years. It is to be found in the Crane watermark which reveals itself when the paper is held against the light. It is our mark of pride in the making of these fine papers for personal, social and business use. It is your mark of assurance when you buy paper; when you use Crane's in your daily correspondence, in formal invitations, in matters of importance for reference and record.

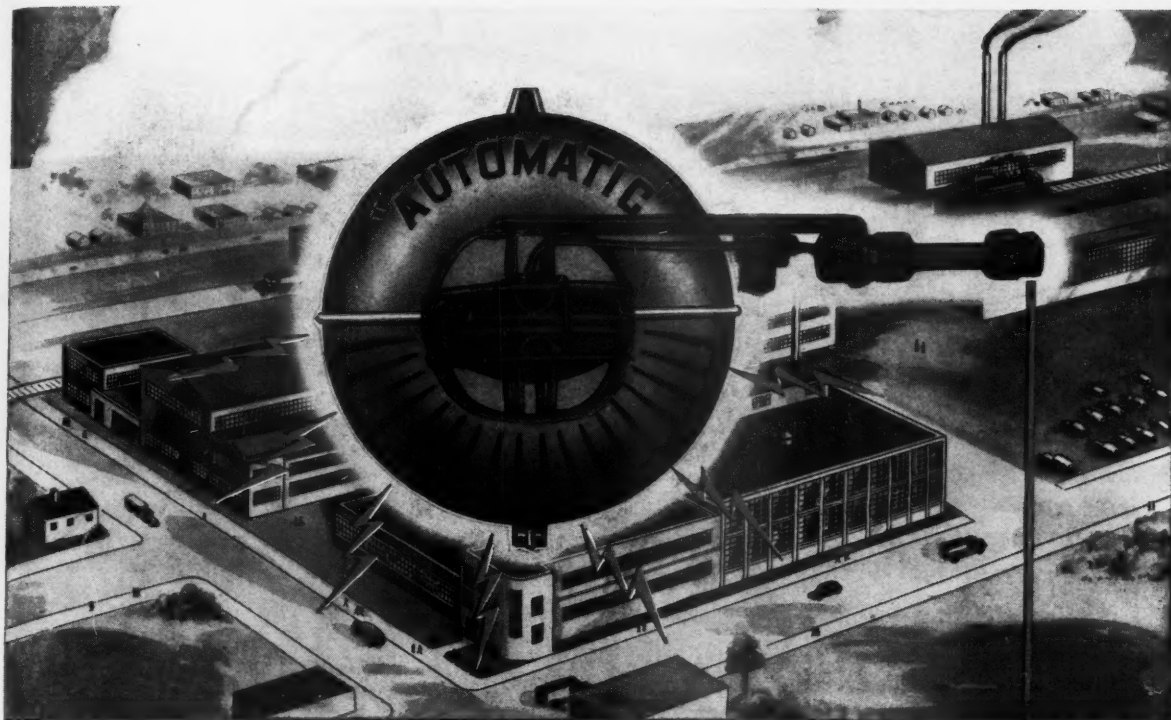
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* One of a series of advertisements based on industrial opportunities in the states served by the Union Pacific Railroad.

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goods are world-famous. Portland's roomy harbor is a flourishing gateway of foreign commerce.

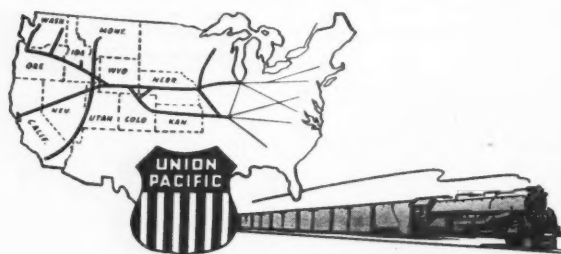
Huge Bonneville Dam assures ample and economical power. A new development program calls for four more dams. Oregon is noted for low electric rates.

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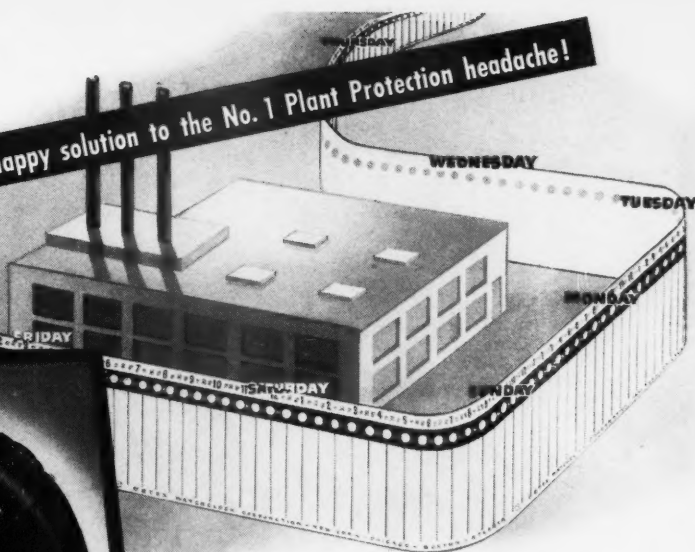
be Specific - say "Union Pacific"

* Address Industrial Department, Union Pacific Railroad, Omaha 2, Nebraska, for information regarding industrial sites.



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answers the question of long week-ends
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What to do about the Watchman during extended plant shutdowns is no longer a management worry.

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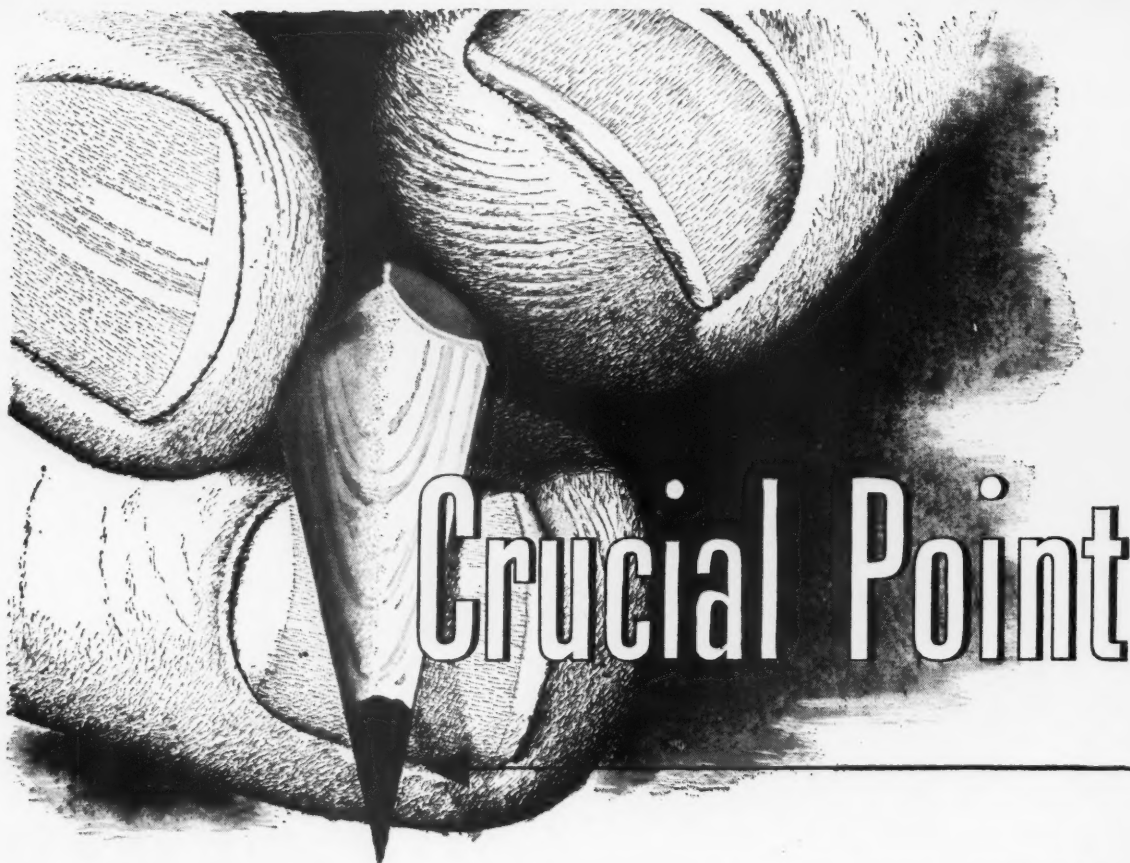


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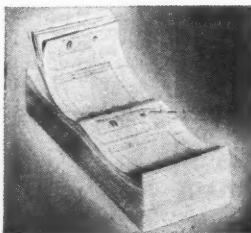
ECONOMY Clerical work reduced, errors and delays minimized

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A pencil point, yes . . . and a crucial point. For in writing out the routine forms upon which every department of your organization depends, a pencil—yes, or a typewriter—can, to a large measure, make or break the efficiency of your business.

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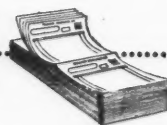
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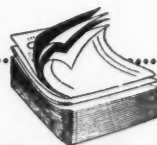
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Of such stuff are dream-dresses made...

Yes, made by the chemist, who can transform commonplace materials like coal, air and water into glamorous materials like nylon tulle.

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It's "*Unseen*" because you rarely see it in its pure state, as it is usually combined with other metals. It's your "*Friend*" because it serves you long and well.

THE INTERNATIONAL NICKEL COMPANY, INC.
New York 5, N. Y.



Nickel

...Your Unseen Friend

*Reg. U. S. Pat. Off.
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A P R I L 1 9 4 7

THE TREND of the American post-war economy is reflected in six basic measurements of business activity as is shown in a chart for the critical years of 1939-1946 prepared by DUN & BRADSTREET, INC. While there are some irregularities, the level is generally higher than in pre-war years.

Charted are the indexes for industrial production, income payments, retail sales, wholesale prices, and current liabilities of failures. Also shown are industrial stock price averages in dollars per share.

The nation's output by the end of 1946, as measured in dollars, again reached the war-time peak attained during the first half of 1945, the major part of this 1946 rise being attributable to price increases. In physical volume it was about 20 per cent under that in the highest war years and about 15 per cent above that in 1941. The chart is available free upon request.

THE OPPORTUNITIES for expanding the trade between the United States and Russia as well as a general background of the past trade relations between the two countries will be discussed in a coming article in DUN's REVIEW by E. C. Ropes, Chief of the U.S.S.R. Division, Office of International Trade, Department of Commerce.

SOME OBSERVATIONS which may serve as a basis for considering the controversial question involving the interrelationship of wages, profits, and prices will be presented in a coming number of DUN's REVIEW by Wassily Leontief, professor of Economics at Harvard University.

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Cover

SOUTH STREET, NEW YORK, 1828

THE smell of spice, hemp, and tar, the stench of bilge; a forest of towering masts; richly carved figureheads on proud bows; piles of casks, barrels, bales, and bags packed with a variety of goods from coffee and fine Madeira to elephants' teeth; the sound of creaking rigging, sweating, swearing dock laborers; teeming activity; the romance and beauty of far away places suggested by flags from many lands; these were some of the things that made South Street on lower Manhattan one of the most exciting spots in all the world in the early 1800's.

The gentle slap of the tide against sturdy hulls, as they impatiently strained at their

moorings, mingled with the raucous shouting of traders and auctioneers as deals were made in the shadow of staunch square riggers whose jib-booms jutted half way across South Street.

Warehousemen, wholesalers, commission merchants, and underwriters occupied the buildings facing this scene on the East River. South Street with Wall, Pearl, and other narrow, colorful streets running west was the center of the city's activity. Here was laid the foundation upon which has been built the Port of New York. Here fortunes were made and lost; brawn, daring, and skillfully timed trading marked the masters and merchants—on South Street.



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depends
on
little
things**

like plastic parts of St. Regis Panelyte

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Dun & Bradstreet, Inc. *The Mercantile Agency*

Spring 1947

Corporation Executives:


Many corporations have been disturbed by the sudden appearance on the 1946 income tax form of an inquiry as to whether 70 per cent of earnings have been distributed, together with a request for the reasons for any lesser distribution. That concern was not lessened by Sec. Snyder's widely publicized warning a few days before March 15th that the explanations reaching the Bureau of Internal Revenue up to that time were not sufficiently explicit. Recent court decisions seem to have favored the Treasury in more than the usual proportion of cases.

All this has been happening in a period in which uncertainties over the amount of funds needed to tide business over future months and years were already great. Moreover, it seems possible, in the view of some commentators, that the scale of application of Section 102 may simultaneously be enlarged to include widely-held as well as close corporations. Only time and the courts will settle this point, but both the idea behind such a tax and a widening scale of operation can have economic consequences not apparent at first glance.

The Bureau of Internal Revenue is administering a provision of law, and its own problems of judgment are difficult. From so small a start as Section 102 the Bureau and business jointly find themselves confronted with a question in public policy which is not yet in focus and still requires immediate attention. The difficulty facing Congress, for its part, is to deal reasonably with one portion of broad tax revision in a manner that will not complicate final solutions.

The study enclosed with this number of Dun's Review brings together the scattered pieces of an old tax puzzle in a setting that may be more complex than was originally contemplated by Congress. It may be of interest to you.

Very truly yours,



A. D. Whiteside President

Does Distribution

COST TOO MUCH OR TOO LITTLE?



NEW YORK SKYLINE FROM ACROSS THE EAST RIVER—HIBBS PHOTOGRAPH

DON FRANCISCO

Vice-President, J. Walter Thompson Company

*F*OR some time we have heard little about the cost of distribution as the spot-light has been on production. And this year, like the war years, will be a race for production. However, next year, and those that follow, will be a race for sales.

Then we will hear again the old questions "Are we spending too much for sales?" or "Are we spending too little?" And probably the old catch-phrase, "Distribution costs too much" again will come out of hiding.

When I was in college I was told that the cost of distribution was too high. The cry then was "Eliminate the mid-

dleman." After 30 years' experience I feel that the cost isn't high for the services given. In some cases it isn't high enough.

In normal times our production is determined by consumption, and the reverse is not true. Sometimes more money spent for selling and promotion would bring lower prices to the consumer and higher profits to the manufacturer.

Consumer demand dictates the number of jobs in our production system. In the United States we will have to sell the consumer about twice as much goods in terms of dollars as we did be-

As emphasis turns from production to sales, the level of distribution costs will receive increasing attention. Dangers are inherent in the arbitrary assumption that such costs are too high warns Mr. Francisco in suggesting a standard for measuring distribution costs in terms of total product cost to consumer.

fore the war, or drastically curtail our productive capacity.

Someone wisely has observed that "nothing happens in our economy until something is sold." Manufacturers and dealers carefully watch sales. They know that a curtailment of services or promotion effort may result in a drop in sales volume. A lessening of sales effort rarely brings lower prices.

If we are to maintain our economy and keep our factories and farms at full production, we cannot exert less effort to maintain consumption. Sooner or later our problem would be not the cost of distribution, but the cost of lack of distribution.

Today distribution faces responsibilities—and opportunities—that are the greatest we have ever known. We are attempting to move a wartime rate of production into a peacetime rate of consumption. The years ahead will require a stepping-up, rather than a lessening of sales effort.

No one can criticize efforts to minimize or eliminate wastes in operating efficiency. That is constructive and not enough has been done about it. But the easily accepted catch-phrase, "Distribution costs too much" becomes dangerous when it is based on the concept that our whole system of distribution is wrong.

Let's examine a few specific aspects of this subject.

Meaning of Distribution Costs

First, what expenses do we include in the cost of distribution? Contrary to popular conception, distribution is something more than wholesaling and retailing. It is much more than selling. The fact that it must absorb such inescapable costs as taxes and transportation is frequently overlooked.

Not long ago the American Society of Mechanical Engineers adopted this definition: "Distribution is the total of all activities involved in the progression of goods from the producer to the consumer. It includes warehousing, transportation, wholesale and retail marketing, advertising, and a substantial part of research, engineering, accounting, and financing."

But how do we judge whether or not distribution costs are too high? Too high in relation to what? What

standard of measurement shall we use?

What is generally meant is that the percentage of the consumer's dollar which is consumed by distribution expense appears to be high in relation to the percentage that is consumed by the cost of production.

In 1870, distribution costs amounted to only 25 per cent of the consumer's dollar, production 75 per cent. By 1930, distribution expenses had increased to 50 per cent.

In 1939, the Twentieth Century Fund presented an exhaustive study of distribution. It found that 59 per cent of the consumer's dollar went for distribution, and 41 per cent went for the cost of production.

Does the fact that an increasingly large proportion of the consumer's dollar goes into distribution costs warrant the conclusion that such costs are too high, or that our system of distribution is inefficient?

Let us consider why the percentage costs of distribution have increased. Distribution costs amounted to little or nothing when each family produced practically everything it needed. But the great variety of things produced were, for the most part, not comparable in quality with the same articles produced by specialists today. Furthermore, based on the number of hours of work required and our present wage standards, the production costs were high.

When production became centralized and division of labor was introduced, costs were reduced, or the quality of merchandise was improved, or both. But to make this possible the volume of production of each article had to be much greater than could be consumed by those who produced it.

So the producer set out to find more customers. He began to add distribution expenses in order to establish sales over a larger area.

Gradually people produced at home a smaller share of the goods they consumed and they bought a larger share in the market places.

Distributors had to bridge two new gaps, one between the place of production and the place of consumption, and the other between the time of production and the time of consumption. This meant added expenses for financ-

ing, transporting, warehousing, selling, and advertising.

As new and better products were devised they needed to be introduced. People had to be told in some way that here were new things that filled long-felt needs. That required advertising.

Finally, new services were demanded by the public, such as credit, delivery, the return-goods privilege, convenience, and wide selection. Apparently the public not only wanted better distribution and more services, but was willing to pay for them.

The cobbler who made shoes for those who called at his shop had no distribution expenses. But if he could sell 100 times as many shoes he could introduce machinery and make them for much less. But to do this he had to be prepared to shoulder additional expenses for freight, dealer margins, and advertising.

Growth of Marketing

The change from hand labor to machine production resulted in a revolutionary reduction in production costs. At the same time there was a consequent increase in distribution costs in order to achieve the necessary volume. Part of the savings of machine production was shifted to marketing expense. The size and importance of the marketing task had increased enormously.

The fact that the cobbler has passed out of the picture as a maker of shoes is evidence in itself that, in spite of the increased distribution costs of manufactured shoes, the total cost to the consumer is less for comparable quality.

It should be emphasized that the large shoe manufacturer, selling in a wide market, had to do more than produce shoes for less than the cobbler. He had to manufacture shoes for *enough* less to pay his added distribution costs for financing, transporting, warehousing, and selling. If he couldn't do that then the cobblers would keep the business. If he did do it then the fact that he had incurred additional expenses for distribution was unimportant either to him or to the public.

Thus it is apparent that the 59 per cent which goes for distribution is partly responsible for the economies of mass production and therefore for keeping production expenses down to 41 per



CORSON PHOTOGRAPH FROM DEVANEY

ABOVE Warehousing, transportation, wholesale and retail marketing, advertising, and a substantial part of research, engineering, accounting, and financing are considered as elements in distribution.

BELOW In this day of the modern independent retailer, the chain store, and the super market, revolutionary changes in distribution methods are not probable, declares Mr. Francisco.



SUPER MARKET, LARCHMONT, N. Y.—HIBBS PHOTOGRAPH

cent. This expense is like that for the machines in the factory, whose operations represent an added cost, yet result in actual economies.

The all-important fact is that distribution cost should be considered as an integral part of total cost, and not dealt with separately.

From the consumer's viewpoint, the important thing is not the ratio between production and distribution costs, but the total which he must pay for a pair of shoes. If the over-all cost is reduced by adding distribution expenses, then the net result is a gain for the community.

Percentage figures are sometimes misleading as they do not reveal actual costs but only the ratio between the expenses of production and the expenses

of distribution. The percentage cost of distribution may be rising while the actual unit cost of distribution may be declining.

Suppose, for example, that by hand labor it cost \$750 to produce certain goods in 1870, and it cost \$250, or 25 per cent of the total cost of \$1,000, to distribute these goods. Then assume that, by the development of machine methods, the cost of production is cut to \$250. If the dollar cost of distribution remains constant at \$250, it has increased as a percentage of the total cost from 25 per cent to 50 per cent. The cost of distribution appears to have doubled but actually the price to the consumer is down to \$500, or half of the original total cost.

Innumerable articles which carry a

seemingly heavy sales and advertising expense show a gradual reduction in the purchase price of the finished article.

In the 25 years preceding the war, the \$1,500 automobile became a much better automobile at \$1,000. In 1910, a tire that would run 2,500 miles cost \$25—a cent a mile. Today, a tire costing \$16 frequently runs 25,000 or even 30,000 miles—less than 1/15th of a cent a mile. The \$50 camera has become a superior one at \$17.50.

One pays one-quarter as much for a nationally advertised light bulb today as they paid for an inferior one in 1923. Nationally advertised gasoline costs 40 per cent less now than in 1925. Vacuum cleaners cost \$70 in 1907, but superior cleaners averaged \$54 in 1941. Electric clocks are 50 per cent lower in

price now than they were in 1930. The average price of brand-advertised electric irons dropped from \$6 to \$2.95 in the 15 years before the recent war. We can all remember when electric refrigerators sold for an average price of \$310 and then dropped to \$130 fourteen years later. Electric washing machine prices dropped from \$154 to \$69 in 14 years.

In 1929, the average radio set cost \$135 in the United States and a few thousand people could amaze their friends with a voice from the air. Today, the average set sells for \$34 and 60 million sets are in use. The price of television sets undoubtedly will show the same trend downward as more and more homes are persuaded to buy.

Thus, one might continue to mention an almost endless list of commodities and services which have borne a relatively high distribution cost, but have sold for less and less to the consumer.

Perhaps a higher distribution expense is the price industry must pay for the economies of mass production. What chiefly should interest the consumer is that he gets better merchandise and better service at a lower cost.

The complaint against the high cost of distribution usually is not aimed at operating inefficiencies. It is based on the idea that the whole system is wrong.

Some people feel that a substantial

reduction in retail prices can be readily effected by some easy process of eliminating people who perform distribution functions.

Revolutionary changes in distribution methods are not probable. We have progressed a long way from the day of the peddler and the frontier trading post to the age of the modern independent retailer, the chain store, and the super market. Under the insistent pressure of competition there will be improvements in the future, as there have been in the past, through study, refinement, and constant evolution.

Studies show that the cost of distribution does not depend on the number of middlemen that intervene between producer and consumer.

It may appear to the uninformed that it is more economical to eliminate wholesalers and retailers and sell vacuum cleaners, for instance, direct to the user. The fact, however, is that before the war, vacuum cleaners could be sold through department stores at prices to the customer 4 to 4½ times the manufacturing cost, while if sold through house-to-house methods, the consumer price was 8 to 8½ times the manufacturing cost.

A study of 18 industry groups in the United States for a 10-year period shows that only 1.8 per cent of total volume is sold direct to consumers.

The proportion was the same in 1939 as in 1929, and no appreciable increase is anticipated since the fact is that this is an extremely expensive type of distribution, despite what some people believe.

The wholesale system is still a major factor in the distribution of goods, and it will continue to be so!

Superior Service, Convenience

It is a curious fact that the public, which has been quick to applaud our inventive and productive genius, has been slow to recognize what a miracle has been accomplished in distribution. Without equally great achievements in mass distribution the accomplishments in the field of mass production would have been impossible.

One of the conspicuous characteristics of our distribution system lies in the superior service, convenience, and wide selection which our people enjoy, and which, for the most part, they apparently want. Whether we are walking down Broadway, motoring through a rural village, or spending a week in the mountains, we expect to be able to obtain—in identical form, quality, and condition—our favorite brands of gasoline, oil, tires, tooth paste, tobacco, soap, cereals, coffee, and other products.

No other country can equal us in this regard. When we compare the area of the United States with that of other nations, and consider the relative quality and diversity of products available, and in common use, we get some idea of what our distribution system has been able to accomplish.

The public has become so accustomed to getting what it wants, when and where it wants it, that it takes this miracle for granted.

This superior service, convenience, and wide selection are just as much a part of our high standard of living as the superior merchandise that our people can buy.

Who would have believed 50 years ago that a nation with 38 million homes would today be using 27 million automobiles?
(Continued on page 68)

Trains and trucks play an important rôle in the American distribution system which provides the superior service, convenience, and wide selection which the American people enjoy, enabling them to find in any part of the country their favorite brands of goods in identical quality.

TRAFFIC ON U. S. ROUTE 1 NEAR NEWARK, N. J.—CORSON PHOTOGRAPH FROM DEVANEY





COAST PRESSERS AT FORD MOTOR COMPANY'S RIVER ROUGE PLANT, DEARBORN, MICH.—DEVANEY PHOTOGRAPH

HERE an industrial leader reviews the fundamental characteristics, principles, accomplishments, and historical background of "big business." In analyzing the evolution of America's leading enterprises, Mr. Robertson includes the gains resulting from improved techniques developed during World War II.

TODAY'S BUSINESS GIANTS— *Little Businesses Grown Up*

A. W. ROBERTSON

Chairman of the Board, Westinghouse Electric Corporation

THE evolution of "big business" has been a gradual process, arising out of the necessity for satisfying man's expanding needs. Current enterprise, however, has been greatly favored by the urgency born of World War II, which was responsible for bringing various production techniques to a high degree of development.

Let us examine some of these techniques briefly before considering the growth of big business and its rôle in today's economic life.

One manifestation of those techniques was in the astonishing speed with which needed items were brought from laboratory development to assembly-line production. This was made

possible by sub-contracting on an unprecedented scale in which hundreds of firms of all sizes participated. Many companies manufactured products which they had not made before.

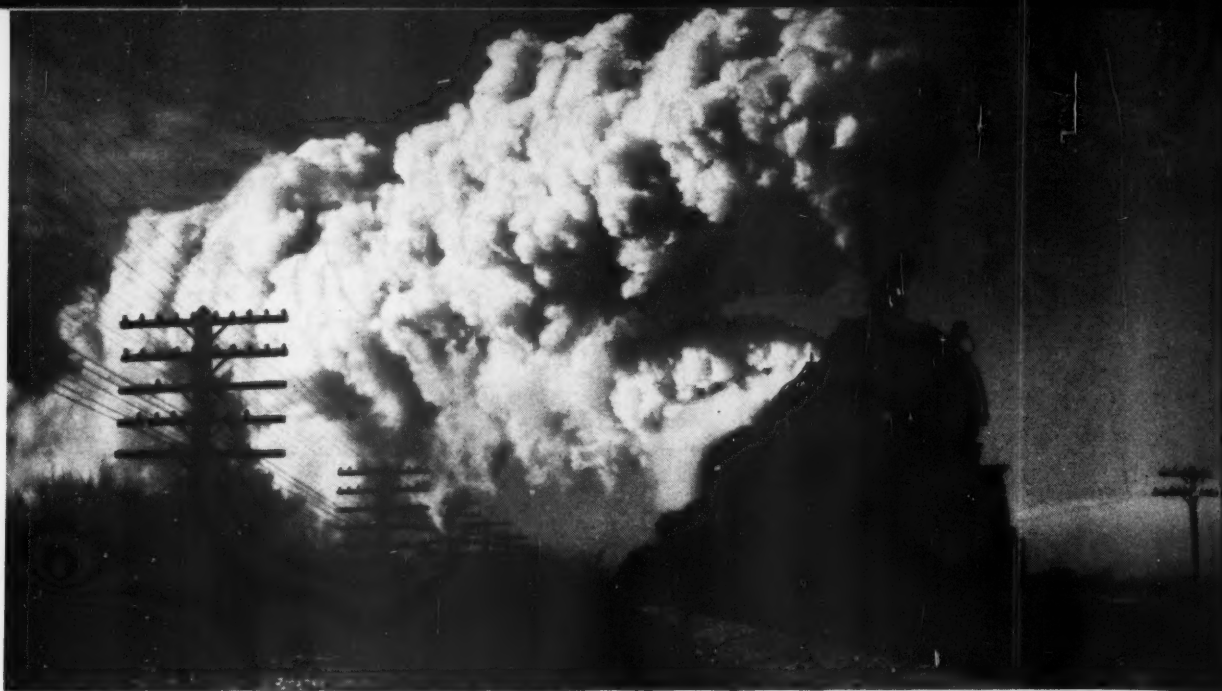
An example of how war requirements enormously expanded production in various fields is provided in Westinghouse Electric Corporation's manufacture of radio equipment. In pre-war days the annual volume of business was less than \$2,000,000. War-time radio contracts totalled \$12,000,000 a month.

The human element played a major rôle in the gigantic production of war material. This record could only have

been achieved under a democratic form of government where the initiative of the free worker was coupled with the incentive to produce which is characteristic of free industry. Imaginations were whetted as workers sensed the importance of their own particular jobs in relation to the total war effort.

Better methods of testing were developed and, despite war-time pressures, the quality of numerous products was improved.

Among the new techniques was one that was devised to combat dampness such as was found in various areas of the Pacific and which caused valuable



FAST FREIGHT—OSMANSON PHOTOGRAPHY

"The first evidence of big business organization in America is to be found in our railroads and telegraph and telephone companies. As invention and development of things susceptible of human use progressed . . . business expanded to make the newly invented thing or service available. No business ever grew unless it was furnishing something the people wanted and were willing to pay for."

equipment to deteriorate very rapidly.

One of the leading industrial gains was that manufacturers learned how to get along with less inventories of raw materials. In the light of current shortages, this knowledge is proving of great value.

On the debit side, it is becoming apparent that we are placing dependence to a disturbing degree upon the rest of the world for copper and various other raw materials. Likewise, the operations of certain cartels in detriment to American interests are impeding the acquisition of different raw materials. Thus, we need to pay greater attention to the question of raw material supply.

In speaking of big business, I am not unmindful that there have been large organizations before this era. In antiquity, Egypt was a great nation and left some enduring monuments as a result of its efforts, but it was a simple organization in a primitive civilization. The Roman Empire and the Catholic Church were later examples of large and powerful, but simple, organizations.

Our knowledge of organization was apparently acquired recently. A study of history discloses that failure after failure accompanied human efforts because of the lack of organization. Con-

sider the Crusades of the eleventh to thirteenth centuries. For three hundred years Western Europe, the seat of such civilization as the world knew, was the spawning ground of huge hordes of pilgrims setting out year after year for the Holy Land. They failed miserably. They were doomed to failure from the start because of lack of organization. The pilgrims never seemed to be able to visualize their objective, count the cost, and plan successfully to reach the goal—the very essence of management. They did not know how to do what they planned to do. Modern business has learned this trick.

Shipping Development

In the centuries following the discovery of America, the shipping of Spain, the Netherlands, and England began to develop some of the characteristics of big business. The individual owner with the single ship gave way to companies with many ships and planned routes of trade. Order began to appear out of the chaos of hit-and-miss sailings. But these too were simple affairs compared to what we now know as big business. One of the earliest larger business ventures in America was the Hudson Bay Com-

pany. It was a substantial affair but relatively simple in its operations. It dominated the north country but its problems were the simple problems of purchasing the pelts from trappers and arranging to distribute food or items of barter over a substantial territory.

The first evidence of big business organization in America is to be found in our railroads and telegraph and telephone companies. As invention and development of things susceptible of human use progressed, business developed to make use of them; or, truer stated, business expanded to make the newly invented thing or service available. No business ever grew unless it was furnishing something the people wanted and were willing to pay for. In the early stages it was necessary to go through a long period of pioneering education before anyone knew of a new service and had any use for it. It always started as an expensive luxury, developing into a daily necessity familiar to millions of persons. Any other road did not lead to bigness.

With the development of better transportation of goods and people through the railroads, and of communication of thoughts and words through the telegraph and telephone, the setting was

right for the growth of nation-wide business. New scientific knowledge stimulated invention. New ideas sprang up like mushrooms. Material for the more abundant life multiplied at an unheard-of pace. As man climbed higher on new things his horizon broadened. It was a colorful period of life that most persons thoroughly enjoyed. Each individual was a part of an expanding universe. The old order was breaking down on all sides, yielding place to new and better ways.

During all the past years of history, the individual or the family had been the unit of economic security. The home had been the place where man erected his barriers against the rigors of nature; where he found shelter from storms and unpleasant climate; where he was protected while he worked making his clothes; and where he could store a little food from season to season. The ancient home had been relatively self-sufficient; but gradually, as the era of new aids to living developed, the family began to lean upon and need facilities furnished by other men working in some organization devoted to making specific products. The farmer began to find use for new or better tools made by other men. The housewife learned the advantage of the sewing machine made by men and women

working for the Singer Sewing Machine Company; the advantages of new soap to take the place of old handmade soft soap that removed the skin as it cleaned. She was enticed by the use of chemicals that softened her water, bleached her clothes, firmed her jellies. As these improvements crept into primitive homes, they changed and the inmates changed also.

Standard of Living Changes

Man soon found that there was an advantage in dividing up the work of the world. The ingenuity and knowledge of especially gifted persons had developed the available know-how of society to the point where heretofore unthought-of services and machines and products could be segregated, made, and furnished to others better than they could provide them for themselves; and in many cases furnish things which they could not furnish for themselves. As a result men everywhere, but particularly in America, began to work for others and not for themselves. The manufacturing of sewing machines became a great industry because every housewife wanted one.

Many men were employed to make the machines and sell them and service them. All the accumulated knowledge and suggestions as to how they could

be improved were gathered together and analyzed and studied and applied and tested and finally adopted if the women who used the machines liked the change. Machine tools were invented to help the workmen do their work. The first sewing machine was a crude affair but it soon developed into a device that could do anything required by the most fastidious and dainty seamstress. She could sew ten times as many things as she could with her own hands. She could have more than one pair of curtains; she could have more clothes and her children could have more clothes. This stimulated the textile industry which had taken over the weaving from the housewife years before. It stimulated the need for washing machines, since the washing had increased as more clothes were available and worn.

I shall not follow these various inventions down each trail to their individual lairs but I cannot resist pointing out that, as more washing machines were used, the washing was more thorough and the standards of cleanliness of everyone were raised. All sorts of new things were needed to keep clean and organized groups of workers of some big businesses were eager to provide them.

Although we have promised not to

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run things down to their ultimate use, we are prompted to state that the sewing machine had scarcely reached the American home before the art of sewing, as expressed in making garments, was organized into a business by enterprising persons and clothes were made by machines in factories better and cheaper than the housewife could make them at home, even with her sewing machine. And so the making of clothes moved out of the home into the factory as other things had done and were to do.

This new system of providing special goods and services for the world developed at fantastic speed and soon dominated our civilization. As each new thing was developed, the way of life of people changed and they found other needs which other people were able to make and supply. And America, the home of big business, the land of plenty with more and more of everything in fantastic extravagance, became the envy of the world. Immigrants poured in. It was inevitable that, in such an atmosphere, people of superior managerial ability should develop superior organizations to furnish things that the growing needs of the people demanded and were willing to pay for. Undoubtedly, if increase in the standard of living is a fair measuring stick, the public got value received; and the maker of the product, through improvements in his manufacture and organization, was able to sell it at a profit.

Business Survival

It is obvious that an organization furnishing a product during this period had to sell it at a price to cover its expenses and leave a margin for expansion methods of manufacture improved almost daily and prices were generally good enough to provide a profit for the better managers. All others passed out. Casualties in business are always terrifying. There is always an epidemic ravaging business. The bankruptcy courts are full of examples of poor managers who couldn't make both ends meet under the same conditions that better men find ideal for prosperous operation. In thinking of the Chrysler Automobile Company, the scores and scores of automobile companies that failed are forgotten. The risk that sur-

rounds the average industrial infant is as real as the risk that the infants in a large family formerly faced. I have been told that Caruso was one of twenty-one children, only three of whom grew up. It is no uncommon thing to have eighteen deaths in business that three may survive.

Those organizations which do survive usually have the knack of fitting into their environment, which is another word for giving the public something that it wants. Such organizations grow into big business and have vitality comparable to the big trees of California that neither fire nor storm can kill. Their vitality is equal to all demands and, no doubt, lesser trees look up at their growing crowns with envy. Petroleum may make our machines run, our airplanes fly, but it needed big business to bring it from its hiding place in the earth's crusts to our machines. Big business is at least the good right arm of practically every valued necessity of our economic life.

Enough of how the world happened to arrive where it is. We now live in a world of big business where huge organizations furnish products and services for everyone. They vary in big-ness, but any of them that you may think of may be classified as "big" compared with an organization of three generations ago. They appear as permanent as the hills. It is not remembered that they ever had humble beginnings and had to serve well to grow big. It is not remembered that they have a precarious day-to-day existence, even as individuals. Our hearts must beat seventy-two times every minute and we must breathe in a few cubic inches of air every few seconds or die. So it is with big business. It must breathe and eat every day in the year. Night and day things move in and out of its warehouses. If it is well nourished, it may outlive the human beings that created it, but, being made by mortals, it too is mortal and will ultimately die. Not too much is known about the disease of a business organization, but the general effect is probably much the same as old age on the human body. Its distribution arteries will become hard; the central pump weak; and its brain tired. And after becoming old and feeble, it will die and pass into oblivion

as its weaker competitors have done.

The modern big business organization is perhaps the most unusual and greatest of man's inventions. It is too recent an arrival to be well understood. In fact, it is growing and changing so fast that it does not lend itself to examination or analysis. Edison is honored as the inventor of the electric light, the one source of illumination without danger of fire, but that invention would have been of no use to mankind without the business organization which brings it into the home and factory. A business organization is the only known means of bringing inventions and knowledge to public attention. Some speculate that Government could do it, but Government never has.

Big Business Organization

The schoolboy might be able to learn about electric energy—how it functions; what are good conductors; what are good insulators; how to make a generator and a motor; how to switch it on and off and control it—but if a man should spend his whole lifetime trying to make these products, he wouldn't be able to produce more than a flicker in the way of an electric lamp even for his old age, let alone for his youth. Only by the work of a highly skilled and specialized organization can one have the electric bulb.

Modern business organization has grown out of the wealth of products and services which knowledge has made available for our use. Big business has made the furnishing of these things its job. Without these products and services, there would be no use for big business organizations, so there would be no such organizations.

Let us stop for a moment and examine the present form of a typical large business organization, realizing of course that they all vary somewhat even as one tree varies from another. I have stated that the organizations prior to those of the present era were simple. I now propose to show that modern organizations are complex.

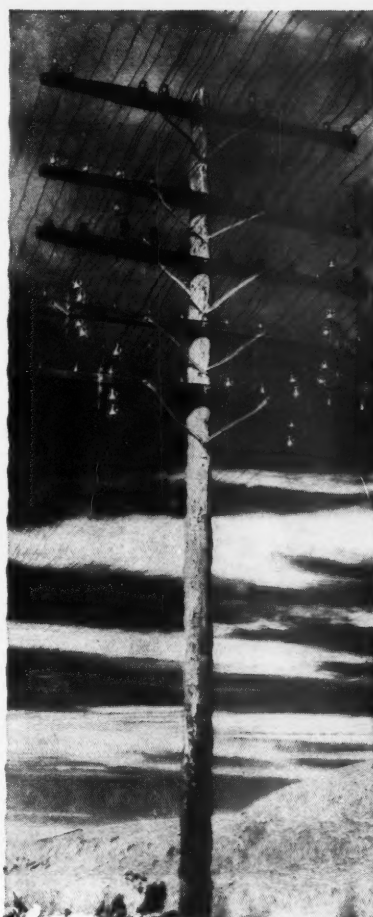
The familiar form of a business organization with its common stocks and bonds, stockholders, directors, president, vice-president, and other officers needs no amplification here. The Eisenhowers, Montgomeries, Halseys, and

MacArthurs of the business world need thousands of assistants with different titles as do military leaders. A mere list of some of the departments in a company managed by assistants to the president is informative. Every organization of any size will have an accounting department, an industrial relations department, an engineering department, a public relations department, a research department, a purchasing department, a legal department, a manufacturing or production department, a testing department, a sales department. And each of these departments has subdivisions of importance. For instance, the accounting department will have a payroll division, an employee accounts division, a capital stock division, a budget division, and a tax accounting division.

One of the odd characteristics of a smoothly functioning business organization is the number of people employed to supervise and direct others. Generally speaking, more workmen are employed to plan, direct, supervise, and record the work of others than there are men engaged in productive work. On the surface such an organization would seem to be top-heavy with overhead expense and yet, with this combination of productive and supervisory labor, many times greater results per individual worker are achieved than under unsupervised conditions.

With these various departments, activities, and functions, it is necessary for business to have co-ordinating machinery of the highest order. This co-ordination is usually found in committees that have no executive authority but study problems and observe operations and make recommendations. Such committees may bear the descriptive name of Policy Committee, Functioning Committee, Planning Committee, and so on. Their personnel is usually made up of executives from many divisions, capable of throwing light on all phases of a subject.

Over the years special laws have been enacted covering business organizations which must be known and followed. Corporations must be more certain that what they do is legal than most individuals are. It is not wise for corporations "to take a chance" as the saying goes. Other important requirements



HARIS EWING

"With the development of better transportation of goods and people through the railroads, and of communication of thoughts and words through the telegraph and the telephone, the setting was right for the growth of nation-wide business. New scientific knowledge stimulated invention."

are that it be financially sound in that it must at all times be able to meet its obligations; to purchase its supplies; to pay its wages and taxes.

Even in a brief article, mention must be made of the men and women working for and operating an organization. Unless free citizens offered to work for a company, it would be without the necessary labor. The well-run company sees to it that its workmen are satisfied with their work and working conditions—so much so that men recommend jobs to their sons and to their friends. The good will of most organizations is so evident that honest effort and good workmanship are the rule, even when employees are not being watched. In other words, a good organization functions well because its

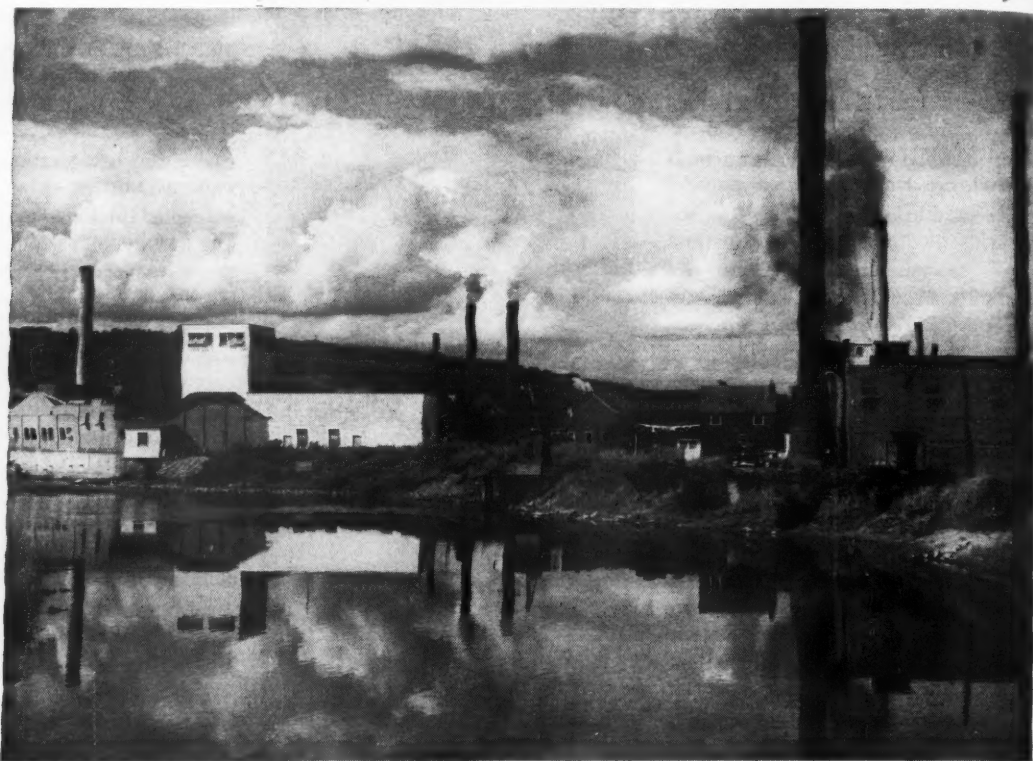
individual members, be they 100 or 100,000, are interested in doing their work well as well as in doing, from time to time, extra things which enable the organization to function satisfactorily. Any well-run organization receives from its employees in the course of a year thousands of suggestions as to how to do things better. Employees making such suggestions are rewarded in some suitable way. They may be promoted in line with their interests and activities or may be rewarded with direct money payments.

Employee Co-operation

A good organization must be permeated by good will. No complicated modern organization could function as an army of reluctant and rebellious slaves. The workman in an organization is controlled in part but he is also free to use his initiative. When these two forces—control by management and initiative of worker—are in happy balance, the organization runs smoothly. Too much of either control or freedom of initiative causes friction and loss of efficiency.

The East Side Steel Company reports that the process of spreading tin on steel is not satisfactory, that it has an idea that tin could be spread thinner and better by some process involving the use of electric high-frequency waves for instantaneous heating. The war is on and the supply of tin is scarce. Any economical and practical way of reducing the amount of tin necessary to coat sheet steel to protect it from rust is a most desirable thing to accomplish. The Westinghouse Electric Corporation undertakes to bring about the desired result. As a matter of course it will take steel and iron and copper as raw materials and, with the use of mica, cotton fabric and varnish, make certain electrical devices which, when operated in conjunction with mechanical forces, move the steel sheets in a continuous flow (which in itself is a miracle) through rolls and, as it moves, mysterious so-called tubes will throw out short electric waves so potent that they immediately melt the tin as it passes through the field at the rate of six hundred or more feet a minute. This melting smooths out the tin, enable a
(Continued on page 77)

The Productivity of Labor in Manufacturing



FACTORIES ALONG PASSAIC RIVER NEAR PATERSON, N. J.—CORSON PHOTOGRAPH FROM DEVANAY

MISUNDERSTANDINGS regarding the relation of labor to productivity have existed on the part of both management and labor. To show the true nature of labor productivity, Mr. Young charts and interprets the studies which have been made of this question.

CHARLES E. YOUNG

Vice-President, The Econometric Institute, Inc.

*I*N viewing productivity from four aspects, namely, what it is, how much of it we have, how we obtained it, and what we can do with more of it when we get it, this article will attempt to develop the following conclusions with respect to labor:

That labor productivity is only one of many types of productivity important to business management and must be translated into dollars—and—cents terms before its measurement can be of much use to management; that labor productivity has increased primarily through mechanization and is primarily a function and responsibility of management; that increased productivity

will continue to result, as it has in the past, in higher real earnings for workers; and that confining the distribution of productivity gains to wage rate increases is neither good economics nor good business.

Students of semantics have emphasized that some words are "good," evoking favorable connotations, while some are "bad" evoking distaste or worse. "Productivity" has come to be generally accepted as a "good" word, and the antithesis of such "bad" words as inefficiency, laziness, and waste. In much of its current popular and business usage, productivity apparently is used as little else but a good word,

denoting something hazily conceived but obviously desirable, of which the economy has somehow been deprived by union leadership, or by faulty management, or simply by the trend of the times.

Further, general discussion of productivity has centered on the single aspect of labor productivity—and with some strange results. Management representatives have presented the low level of production per man-hour in opposition to wage-increase proposals, with the clear implication that low productivity is the fault of the workers, their union leaders, or both, and with the additional implication that man-

agement would be willing to match future gains in production per man-hour point for point with advances in hourly wage rates. Labor representatives, in turn, have contended that, if productivity is low, it is not the fault of workers or of organized labor, an argument which clearly implies that increased productivity in the future could not be accredited to labor, either, and would not entitle workers to wage increases.

Actually, productivity has both more precise and more varied meanings than such usages imply. Broadly defined, productivity is the ratio between units of results obtained and units of efforts or expenditure required to gain that output. For example, current efforts of manufacturing companies to allocate scarce materials to their production in such a way as to yield maximum profits on sales are aiming at a specific kind of productivity of materials, measured in terms of profit per pound (or ton) of material used. The prospective purchaser of a machine, comparing expected increases in output with the expenditure required, is judging the probable productivity of the machine. The executive considering a reassignment of functions among his managers is, in effect, considering the productivity

of management. Within this general framework of productivity questions, the productivity of labor is but a special, though certainly a highly important, case.

Labor Productivity Measure

The most generally accepted measure of labor productivity is the number of physical units produced per man-hour of work. From the standpoint of fitting into the general structure of management problems and of generally-available accounting records, it might appear desirable to express productivity in dollar terms, such as value of output per man-hour, or value of output per dollar of payroll. The difficulty of this approach, of course, is that it introduces the additional variables of prices and wage rates into the comparison.

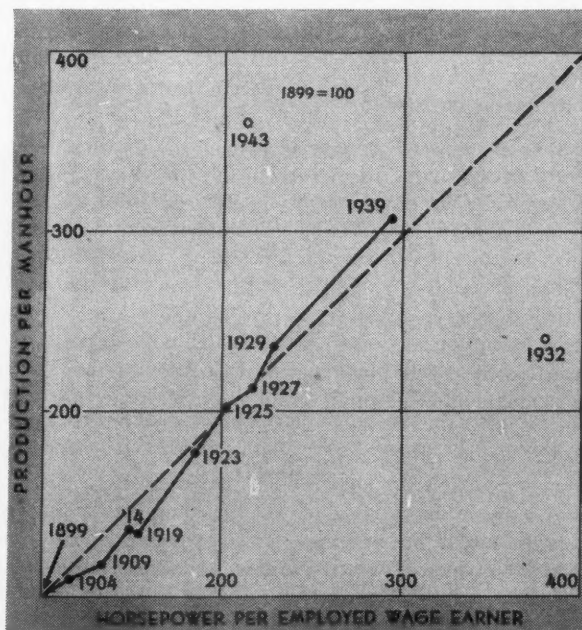
Differences in prices between products at any given time, or different prices for the same product at different times, make such composite comparisons difficult and reduce their value. For this reason, the most useful pattern of logic for translating productivity studies into usable information for management begins with the comparison of output in physical units and man-hours worked, then adds separately the elements of price of the product,

hourly wage rates, and other employee compensation to arrive at the comparison between sales value and payroll cost on which management decisions must be based.

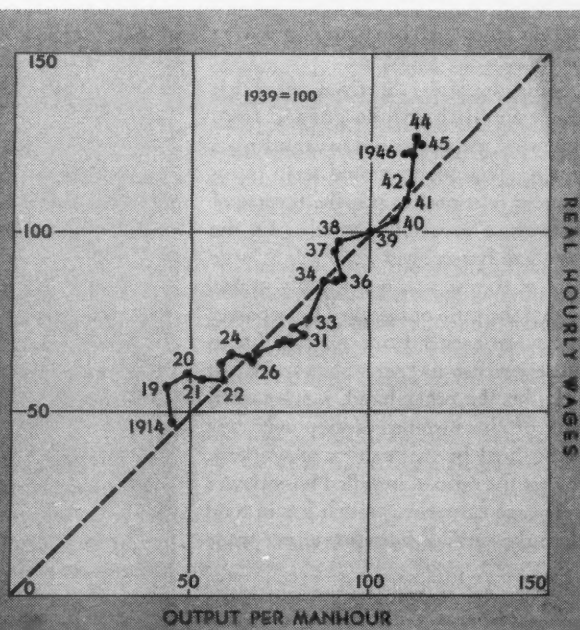
Some interesting relationships concerning the productivity of labor in manufacturing can be gleaned from data available over a considerable span of years. Much of the pioneering work in this field of statistical analysis has been done by Dr. Solomon Fabricant of the National Bureau of Economic Research, on whose findings this discussion will draw heavily. Other statistical series involved have been compiled by the Bureau of Labor Statistics of the United States Department of Labor, by the Board of Governors of the Federal Reserve System (abbreviated hereafter as BLS and FRB), and by the United States Bureau of the Census.

Between 1899 and 1939, the physical volume of manufacturing output per man-hour worked in manufacturing, as reported by Dr. Fabricant, more than tripled, rising from an index of 100 in 1899 to an index of 309 in 1939. This 40-year period reflected a substantial increase in manufacturing output (from an index of 100 in 1899 to an index of 374 in 1939) and in the number of

RELATION OF PRODUCTIVITY TO HORSEPOWER IN MANUFACTURING



REAL HOURLY WAGES VS. OUTPUT PER MANHOUR IN MANUFACTURING



employees in manufacturing establishments (from an index of 100 in 1899 to an index of 176 in 1939); weekly hours worked declined by about one-third, from approximately 55 hours in 1899 to 37.7 hours in 1939. Surpassing these other changes, the period also was one of intensive development in the mechanization of manufacturing; the installed horsepower in manufacturing establishments increased from 100 to an index of 514 in 1939.

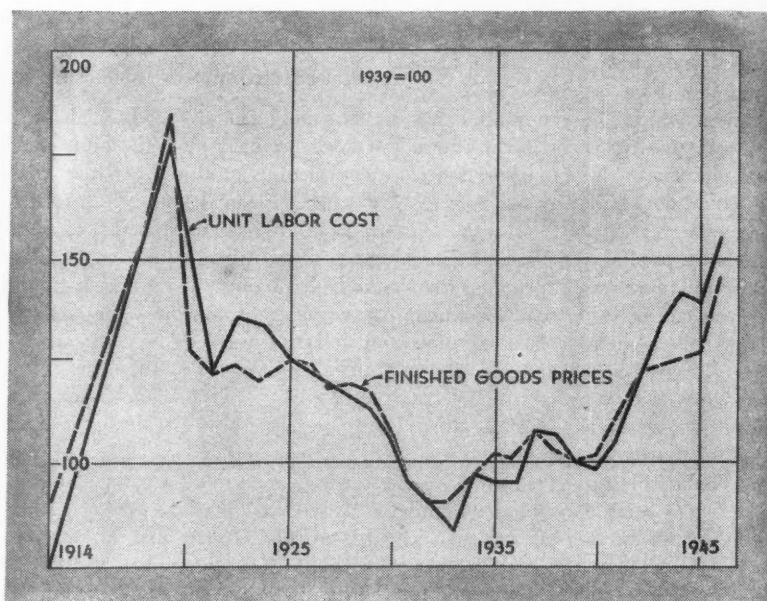
A chart on page 21, tying together these several developments, compares the growth of production per man-hour in manufacturing with the increase in horsepower per wage earner in manufacturing.* Each dot shows, for the indicated year, the level of horsepower per wage earner and the level of output per man-hour.

The diagonal line on the chart simply shows, as a guide, a 1-for-1 relationship. If all the dots fell exactly on this line, every change in horsepower per wage earner would have been reflected exactly by a corresponding change in output per man-hour. Actually, during the first 20 years of this period, to 1919, output per man-hour rose less rapidly than horsepower available per wage earner, while in the following 20 years it rose more rapidly. These variations presumably reflect the influence of other factors than mechanizations, as well as the efficiency of the machines in which the horsepower were incorporated and the efficiency of their application to manufacturing problems.

Some idea of the shortcomings of this rough approach can be gained from observing the points for 1932 and 1943, which, taken alone, would seem to indicate a relationship just the reverse of that which generally prevails. Of the installed horsepower in 1932 a large part, of course, was not actually in use, so that the ratio of *installed* horsepower per wage earner bore no relation to horsepower *in use* per wage earner. In 1943, on the other hand, a substantial part of the installed horsepower was being used by extra shifts of workers, so that the ratio of installed horsepower per wage earner was much less in total than the ratio of horsepower per wage

* The charts and data presented in this article were developed in a study by the author during his employment by the Westinghouse Electric Corporation, with the assistance of Miss Gertrude F. Shirk and the counsel and cooperation of Mr. F. D. Newbury.

UNIT LABOR COST AS COMPARED WITH FINISHED GOODS PRICES



earner on any one shift. These extreme conditions point to the desirability of data on horsepower actually in use per regular-shift wage earner—data which unfortunately are not available.

Despite the shortcomings of this explanation of productivity changes under such extreme conditions, it is submitted that the study indicates a very close relationship, over a long period of years, between the gains in productivity and the application of power equipment to manufacturing.

Importance of Data

Some of the implications of this relationship are well worth understanding. For example, the number of wage earners in manufacturing is now about 40 per cent larger than in 1939. To support the pre-war level of productivity for this expanded work force should require either an expansion of about the same proportion in horsepower installed in peacetime manufacturing establishments or the continuation of extra-shift work, so that the relatively scarce equipment can be used by a greater number of workers. Since it appears that the expansion of installed horsepower available for peacetime use has been proportionately less than the increase in the number of

manufacturing wage earners, there are grounds for expecting either a slight net decline in labor productivity in manufacturing from the pre-war level or continuation of the war-time pressure for extra shifts in order to make maximum use of equipment.

The pressure for further advances in productivity, however, is very strong. Average hourly earnings in all manufacturing in November 1946 were 80 per cent above their average in 1939. To offset this increase—to say nothing of any subsequent increases—by higher productivity would require a further increase of 40 per cent over the existing total of installed horsepower in American manufacturing—a more extensive addition to manufacturing equipment than occurred in the record-breaking 7-year period between 1939 and 1946. Such an expansion job would assure a sustained (though not necessarily uninterrupted) high level of activity for producers of manufacturing equipment for years to come.

Any such sustained program of technological advance and increased mechanization will need to be supported by a political and economic climate conducive to large-scale investment. It is worth noting that an atmosphere of hostility to investment and investors

tends toward inflation, not only for the well-known and oft-cited reasons brought to bear against the New Deal, but because of its restricting the long-range accumulation of productivity gains which tends toward higher unit labor cost and higher prices—a relationship which will be expanded shortly.

Experience during and after World War I shows that production per man-hour in manufacturing was slightly lower in 1919 than in 1914, despite a slightly higher level of horsepower per wage earner. In the ensuing 10 years, in a political and economic climate unusually favorable to investment, both horsepower per wage earner and production per man-hour in manufacturing advanced rapidly.

The relationship between unit labor cost in manufacturing and the prices of manufactured products is demonstrated in a chart on page 22. Unit labor cost, as used here, is obtained by dividing an index of average hourly earnings in manufacturing, as reported by the BLS, by the index of productivity. (Earnings per man-hour divided by production per man-hour equals labor cost per unit of production.) Nearly-identical results can be obtained by dividing the Federal Reserve payrolls index by the Federal Reserve industrial production index. Dr. Fabricant's figures on productivity were used through 1939;

subsequent figures were derived from Federal Reserve figures on industrial production and BLS data on employment and hours.* The price series is published by the BLS.

The chart provides convincing evidence that changes in unit labor cost—that is, in average hourly earnings adjusted for changes in productivity—account in large part for the major swings in commodity prices. Perhaps the most interesting portion of the chart is the period from 1942 on. Until the Spring of 1942 the rise in unit labor cost and in prices of manufactured goods had gone hand in hand; for the balance of the war period the rise in unit labor cost continued, but the rise in prices of manufactured products was greatly restrained by OPA and other war-time controls, so that by mid-1945 unit labor cost had outrun the average of manufactured products prices by about 10 per cent.

The first post-war round of wage increases added fuel to the fire, and prices of manufactured products began to rise strongly in the first half of 1946. With decontrol, prices have more than closed the gap; by early 1947 the BLS index of manufactured goods prices was 68 per cent above 1939 with unit labor

* There is some evidence to indicate that the FRB industrial production index may have been overstated during the war by as much as 15 per cent. If so, my war-time figures for productivity are too high, and my war-time figures for unit labor costs too low.

costs running about 55 to 60 per cent above 1939. Thus for the first time in nearly 5 years the average prices of manufactured goods are in line with—or above—the average level of unit labor cost for all manufacturing. For individual industries within the average, this balance clearly does not apply; some prices are excessive in relation to labor cost while some are still low.

Readjustment in Thinking

The achievement of over-all balance between prices and labor cost, however, calls for a sharp readjustment of habits of thought formed during the past 5 years. The steam has gone out of the upward pressure of unit labor cost on prices, and, if the broad and substantial gains in labor productivity which appear to be in prospect over the next several years exceed the further rises in wage rates, competitive pressure will force the general level of prices gradually downward—a situation generally analogous to the behavior of unit labor cost and prices during the middle and late 1920's.

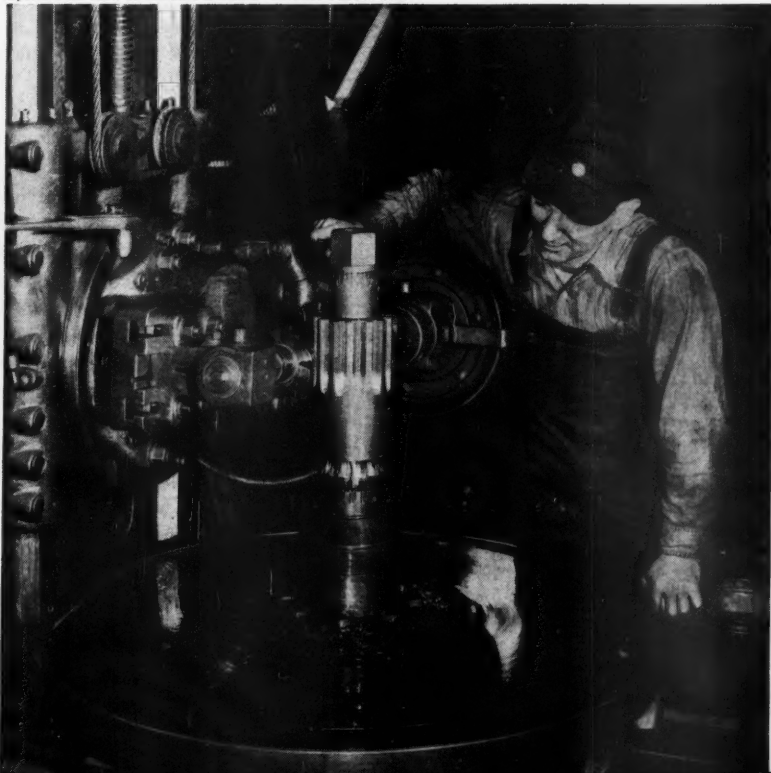
Changes in "real" hourly earnings of manufacturing workers (an index of dollar—and—cents earnings divided by the consumer price index of the BLS) are compared with changes in production per man-hour in manufacturing in a chart on page 21.

Each dot shows both figures for one year. Again, the diagonal line across the chart simply shows, for purposes of comparison, a 1-for-1 relationship, if all the dots fell exactly on this line, each change in production per man-hour would have been matched exactly in the same year by a corresponding change in real hourly earnings of manufacturing workers.

The fact that the relationship between real hourly earnings and production per man-hour of manufacturing wage earners has clung so persistently to this 1-for-1 relationship over the whole period covered by the chart, varying first to one side and then to the
(Continued on page 62)

"Over the past 30 years production per man-hour has shown a great and almost-continuous rise, and so have the real hourly earnings of factory wage earners, sometimes through higher wage rates, at other times—and just as effectively—through lower prices."

ADJUSTING OIL FLOW ON HOBBERING MACHINE—DEVANEY PHOTOGRAPH





AN informal appraisal of conditions in Germany as seen by an official attached to the American Military Government in Berlin is presented in this letter written to Edwin B. George, DUN & BRADSTREET Economist, by Saul Nelson, Chief, Reports and Statistics Branch, Economics Division.

Daily Life in Occupied Germany

Dear Eddie:

More time than I dare confess to has slipped away since my last letter, with the weeks today seeming to elude my grasp more rapidly than did the days last Summer. Part of the difference, of course, is due to the fact that I am once more a member of a reunited family, with all the thousand things that make up family living filling up the time that one had previously to contrive to spend in unsatisfactory, artificial ways. But principally it is just the usual inconsiderate way time has of speeding up as soon as the novelty of changed surroundings wears off and one settles into routine habits.

For, unreal as the pattern of living here is, one must finally accept it as the normal and come to regard anything different as the abnormal. Thus, when I came to Copenhagen to meet Eleanor, it took me days to get used to accepting the natural as something not strangely unnatural. Shop windows full of merchandise, restaurants serving excellent food to anyone who had the price, street transportation running full blast with windows in place in the street cars, lights on the streets at night—all these one had to get used to. But, above all, one had to realize that the well-fed, well-dressed, busy people one saw on

the street were your friends and not your just-conquered enemies, that here there was no sharp caste distinction between Germans and Allied, no impassable social gulf between the victors and the servile vanquished. The one common touch of street "operators" offering to buy your cigarettes at fantastic prices only accentuated the other contrasts.

And, after a few such days "outside," it took no effort at all to slip back to the old adjustments, and to reaccept Germany and Berlin as the accustomed order of things. (Even including the institution known as "Stromsperre"

under which electric current is turned off on a rotating schedule about two to four hours each day, and which means that at the moment I am writing by candlelight.)

Just what is this pattern of life which one finally accepts as the normal? Most all-pervading perhaps, and hardest to get used to at first, is the sharp division of the dwellers in Germany into two separate castes, the rulers and the conquered or, as the German language signs usually put it, "Allierte" and "Zivilisten." (The latter term, whose direct translation is of course "civilian," is merely a euphemism for "German.") Signs saying "Kein Eintritt fuer Zivilisten," or "Nur fuer Allierte" are all over; separate entrances are provided in many places, transportation operated by Military Government has a system of segregation, civilian German railroad trains always have compartments (usually the only "soft" ones) reserved for Allied personnel, and so on. The segregation is usually enforced by German policemen who show extraordinary zeal at barring their compatriots from the prohibited places. Nor is it entirely one-sided, there are numerous German places which are barred to Allied personnel, such as German eating places generally and some of the notorious night clubs of Berlin.

Limited Intermingling

Of course some mixing does go on, but it does not reach wide or deep. The appeal of the opera, concert, and ballet is universal. German *frauleins*, if they bear cards certifying their social acceptability, may enter certain American clubs. German officials are occasionally entertained by their American associates, though the reverse is very rare. Under a new directive they can even, under special circumstances, be the guests of an American at an American mess. Very recently, German correspondents were admitted to official press conferences. Individual friendships—platonic and otherwise—are moderately frequent. Among the children, particularly, there is fair amount of mixing; both Dick and Joan have picked up a number of friends among the German children of the neighborhood. Officially sponsored joint discussion forums and Christmas

parties add to the roster. But all this is very peripheral.

The basic cleavages always remain. On the purely physical side they are constantly evident. The Americans and their allies are well fed, they usually live in adequately heated houses (though German architecture is not always proof against the blasts of European Winter and the coal shortage is even affecting allied billets), their living accommodations are normally adequate though rarely lavish (I have yet to see any of the 22-room houses depicted as normal quarters by one correspondent—the average space per person is little if any more than at home), when they travel they can usually get a berth (if they have enough rank) or at least a seat on the trains; in short their physical needs are reasonably well taken care of.

In contrast the average German is not quite as well clothed, distinctly less well fed, much more crowded whether he is living or travelling, and very much colder. The gradation in comparatives is intended. Thus, while the average German undoubtedly has less clothes in his cupboard than the American, he—or she—usually appears more out of fashion than shabby, and often the clothing is far better adapted for the climate. (One Sunday, when there was a lot of overtime work in my office, we had a dozen German typists report in fur coats and dresses which their American co-workers regarded with real envy.) As to food, the picture varies greatly; those who work for the occupation forces directly or indirectly are usually amply fed and look it; those who live in rural districts and throughout Bavaria, are not badly fed; urban dwellers generally get less and are usually thin, particularly in the British Zone; yet it is rare that you see anyone showing visible signs of real malnutrition.

Crowding is universal, in homes, on trolleys, and on trains where there is always SRO even for day-long trips. Heating is the most serious problem, particularly in this bitter Winter; pipes burst and disrupt the water supply in the unheated dwellings; heating centers are opened in Berlin where people can come in for a while to get warm and are closed again because even they can-

not get coal; factories shut down because workers cannot function in sub-zero temperatures.

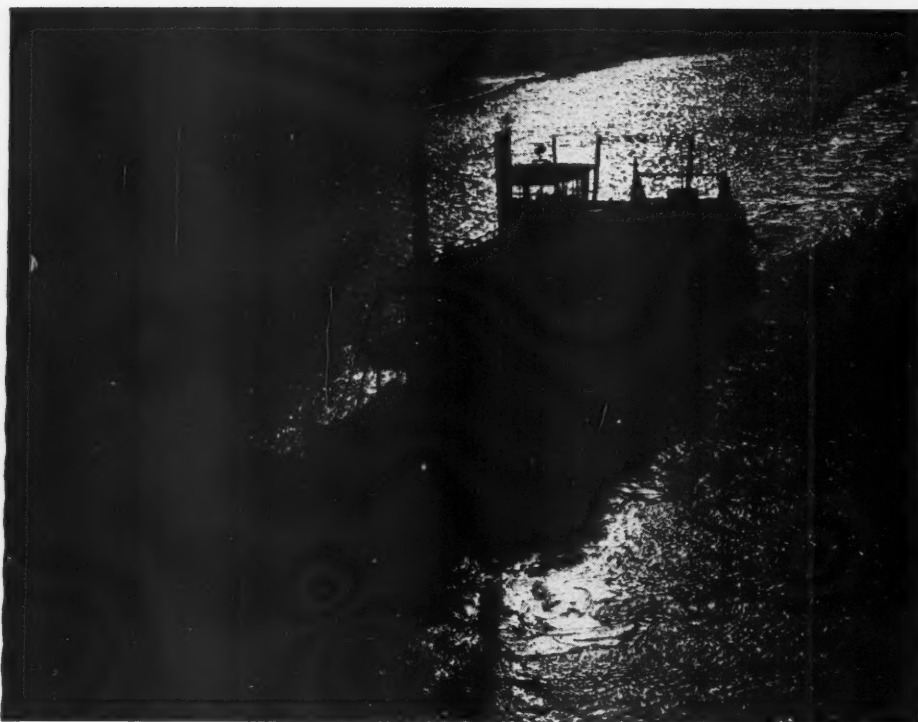
So much for the apparent physical differences. The psychological differences are, of course, somewhat harder to define precisely. Yet, they are, if anything, more universal and more all pervading. The average American in Germany thinks pretty much as he does at home, with the same wide range of differences in political and social outlook. To varying extents, of course, he has generally absorbed some of the inevitable conqueror's psychology. He has become used to having far more done for him, particularly with respect to the ordinary chores of living and housekeeping, than he would at home. On the credit side there is perhaps a higher degree of political consciousness among the Americans here than at home, and a slightly greater appreciation and understanding of world affairs.

Trend of German Thought

As far as the Germans are concerned, their thinking is obviously not set in the same pattern as ours. The major part of their life is inevitably taken up with the day-to-day problems of continuing to exist under adverse circumstances; of extending their food rations through various kinds and degrees of black market activities, and above all, at this time, of keeping warm. There is no evidence that the remaining time has been adequate to permit any really serious reappraisal of their political philosophies nor are the circumstances propitious for such thinking. Certainly there are very few who seem to have developed any real concept of what democracy means, though they march up to the polls dutifully enough at each of the many elections and cast their votes for—or more usually against—someone or something.

Most of them will tell you at length why, in their opinion, various acts of commission or omission on our part are not consistent with what they regard as democracy. The more intelligent will enter their comments on specific issues such as the denazification program in which they say that the general and somewhat inflexible character of the rules we have established

(Continued on page 58)



OSMANSON PHOTOGRAPH

REDUCING COSTS *through Improving Labor Relations*

A. CORNING WHITE

*Special Assistant to the Deputy Director
for General Disposals, New York Regional
Office, War Assets Administration*

*I*N pleasant contrast with the situation obtaining at this time a year ago, and despite threatening utterances from certain of the more intransigent leaders of labor, there appears to be a strong probability we shall enjoy comparative industrial peace for the next few months, at least until after Congress has provided the country with some new labor legislation.

The smart policy for management during this period of prospective peace is systematically to cultivate the goodwill of the workers. As more merchandise comes on the market, prices will assume an increasingly important posi-

tion in the competitive picture, not only within each particular industry, but also among the various industries with each competing for a larger share of consumer spending. To make prices competitively attractive in the period ahead of us, we must find ways of further reducing labor costs.

The method for reducing such costs can not be a reduction in wages. It must be an improvement in output. While we may effect certain economies by improving manufacturing techniques, our greatest opportunity lies in the direction of obtaining more work from labor. For most of the period since the end of World War II, labor has been "taking it easy." To cut labor

costs substantially we must instill in our workers a will to work. This means convincing them that the better they work, the better off they will be.

First, we must get rid of the fear that our workers want to run our business. True, the Communists would like to. A few leaders in the more radical international unions would like to. But most labor leaders don't want to manage industry. They have more than enough trouble in trying to run their own unions. And the men and women on the production lines aren't much interested in trying to become managers. But, as my friend, Whiting Williams, pointed out years ago in his excellent study of industrial relations

"Mainsprings of Men," people who labor, whether they dig coal in Pennsylvania or stitch brassieres in New York, want to be regarded as people, not just machines. And this is where many of us must fundamentally change our attitude. We must learn to consider labor not as just a part of the production machinery, but as people whose hopes, fears, emotions, and prejudices must always be taken into account.

For fifteen years prior to the late War, when I became organizational adviser for the War Production Board, I was a management consultant for large corporations. As such, I came in contact with many executives of big business. Too many of these men regarded labor as just a part of the plant—like the milling machines—and just as impersonal. As long as management cherishes this attitude, labor relations won't be improved.

Equally dangerous, though fortunately rarer, is the belief cherished by a number of industrialists—sincere men, too—that all labor leaders are just naturally exceedingly difficult to deal with. The conduct of some labor leaders certainly is not pretty.

But the actions of these men are as deeply deplored by the responsible majority as they are loathed by management. We must be willing to assume that the representatives of labor with whom we must deal are decent, until they are proved otherwise.

Steps to Be Taken

Let us consider certain specific steps which I believe management should take. I believe that in cases where it has not already done so, and that is in most of the country's plants, management should:

1. Set up labor-management committees to consider means for improving operations.

2. Establish efficiency incentives for its workers.

3. Inaugurate profit-sharing.

In the following paragraphs I shall highlight what each of these steps may reasonably be expected to accomplish, provided action regarding them is taken intelligently.

A labor-management committee should *not* be confused with a griev-

ance committee. Today, practically all union contracts provide machinery for handling wage questions and for grievance committees to handle the workers' gripes. The rôle of a grievance committee is mainly negative. A grievance committee deals with specific complaints that already have been formulated.

A labor-management committee deals with *ideas* and with *ways* of improving the company's operations. It functions in a non-controversial atmosphere. What such a committee aims to do is for everyone's benefit.

Its functions include: improving working conditions, not to correct, but to forestall trouble; solving production problems; conserving tools and equipment; devising means for reducing scrap; inaugurating methods for accident prevention; arranging for plant-wide dissemination of information about company problems and policies; sponsoring health and recreation programs; and generally dealing with all suggestions for making the company a good place to work and a profitable enterprise for the owners.

Take, for example, the matter of evaluating employee suggestions. Where does a smart, high-priced management consultant look for ways of

improving his client's operations? He simply canvasses representative employees for their ideas. During all my experiences as a management consultant, I almost always could find in the minds of employees a solution to any problem a client might have, for too many top executives fail to ask their employees' advice. This is not because they don't operate employee suggestion systems. But employee suggestion systems without protection for the employee in the form of a labor-management committee to evaluate the suggestions and to see that employees submitting usable ideas are suitably compensated, are generally of little use to anyone.

Efficiency Incentives

Installation of efficiency (wage) incentives can make our man-hour output far greater. Anyone who knows what actually goes on in a manufacturing plant knows that labor productivity is a variable.

Some people just naturally work faster than others. But where compensation is limited to the hourly rate, the better workers ease down to the pace of the slowest. Everybody loses. Output is lower than necessary. Manufacturing costs are higher. Prices of the



finished product are higher. And the take-home pay of the workers is lower than it would be if they did their best and were compensated accordingly.

Under our competitive price system, once a company has agreed to a base wage, the only way it can afford to increase a worker's pay is by obtaining a corresponding increase in his output. And from the labor angle, the best justification for asking for more money is through guaranteeing delivery of more productive effort. Without changing base rates, wages can be increased by paying additional for all output in excess of a standard base.

Labor's justifiable objection in the past to efficiency incentive pay plans has been that the standards set for base output were arbitrarily established by management and represented, not a fair average output per hour, but the *maximum* a worker could stand. Elimination of this objection is quite simple. It consists in having the standards set by the company engineers in *collaboration* with the union.

When this is done, there can be no grounds for a complaint from labor. For under this plan the slow worker is sure of a fair base wage for a minimum output. A labor cost per unit of work turned out is computed from this base wage and base output. Even if the company pays a worker all of this unit cost for each unit he turns out in excess of the standard base, the company has achieved a certain over-all reduction in unit cost through reduction in unit overhead cost, and the worker gets additional pay for every bit of efficiency he can develop above the minimum standard.

Analysis of the results of new efficiency (wage) incentive plans in 514 companies shows that, while in most instances the workers were not given full pay for the savings they achieved, they averaged a 17 per cent increase in take-home pay above their previous earnings, and the company's costs decreased an average of approximately 13 per cent. A plan like this which gives the company lower costs and its workers take-home pay *additional* to that promised in their union contract, helps materially in improving labor-management relations.

A third step for improvement of la-

bor relations is the inauguration by management of a plan for letting the workers receive a share in the company's profits. This involves a voluntary agreement by virtue of which an employee is entitled to receive a share, fixed beforehand, in the profits of his employer. While efficiency incentives provide labor with immediate inducement for doing an even better job, they are only *short-term* incentives. Profit-sharing gives labor a sound incentive for co-operating with management for the *long-term* pull, the year-in, year-out effort to keep the concern going and profitable to its owners.

Loyalty Builder

Profit-sharing with labor should be used by management to build and hold the workers' loyalty to, and interest in, the success of the company as a lifetime career for themselves. This result can be achieved by placing a worker's share in long-term profits in trust for distribution to him when he is likely to need it most, that is, when he leaves the company, usually by retirement, or when he needs a loan or under any reasonable set of conditions approved by the committee establishing the fund's disbursement policies.

The percentage of annual profits allocated to employees should be on a sliding scale in relation to the company's profit, and should start only after a reasonable minimum profit allocable to surplus and dividends has been achieved. Further, profits should

be figured against operation's income and expense and not against a fictitiously high capital investment.

The fund thus accumulated should be administered, not by the company, but by a reputable trust institution and under the general direction of the labor-management committee.

Benefits to the employee may be paid as an annuity to his estate upon his death, as a loan upon approval of the labor-management committee, as a supplement to reduced earnings in a period of depression, and so on. The fund is always under joint labor-management control with the interest of the workers assured of adequate protection. This gives the worker a real stake in the company's continuing progress.

As one local union leader in a plant in the Mid-West remarked to me, "You know, Mr. White, one of the main reasons we've had so little labor trouble in this company is that everybody here has a real stake in the company's profits. Naturally, that makes for stability."

Now to sum up. Our best bet for reducing our costs lies in stepping up per hour output of labor. This means stimulating employees to work harder. This implies giving them good reasons for making more effort. Specifically, three measures which experience has proved will build the good-will of workers toward the company and stimulate per man output are: the establishment of labor-management committees, installation of efficiency incentives, and profit-sharing.

MONKMUYLE PHOTOGRAPH





ANDERSON PHOTOGRAPH FROM DEANLEY

The Trend

OF BUSINESS

PRODUCTION . . . PRICES . . . TRADE . . . FINANCE

Peacetime peaks in industrial activity were maintained in February and March; employment and income fluctuated seasonally at record levels. There was a narrowing in the gains over a year ago in retail trade; a new upward spurt in prices occurred.

NEW peacetime records in total industrial output of United States' factories and mines were set in the first quarter of 1947. In February production was retarded somewhat by sub-freezing weather and blizzards. In some sections of the country, the increased use of fuel for home heating cut the availability for industrial usage; shipments of necessary supplies were held

up; and workers had difficulty reaching plants. Such interferences with industrial activity, however, were relatively small compared with the dislocations a year ago due to strikes.

In February and the first weeks of March steel mills pushed their output to the highest levels since May 1945. There was only a slight decline in bituminous coal production in Febru-

Industrial Production

Seasonally Adjusted Index: 1935-1939 = 100; Federal Reserve Board

	1944	1945	1946	1947
January	243	234	160	188
February	244	236	152	188*
March	244	235	168	
April	230	230	165	
May	236	228	159	
June	235	228	170	
July	230	210	172	
August	232	186	177	
September	230	167	179	
October	232	162	181	
November	232	168	182	
December	232	163	181	

* Approximation; figure from quoted source not available.

ary from the 20-year high in January. Automobile plants assembled more cars in February than in January, making production for the first two months of 1947 almost five times that in the corresponding 1946 months.

Some other available indicators of production moved only slightly in February and in opposite directions. Electric power output declined somewhat; daily average crude oil production rose. Lumber, paper, paperboard, cheese, flour, and butter output increased from January to February; meat production fell off.

From the end of June to the end of January, manufacturers' stocks increased \$3.4 billion in value. At the same time monthly shipments rose in value about \$3.5 billion, so that they totalled \$13.3 billion in January. The daily average of new order volume was higher in January than in December, reflecting a rise in orders in both durable and nondurable goods industries.

Employment Although as many persons were classified as employed in the February as in the January census week, lack of materials and cold weather with accompanying industrial fuel shortages contributed to the reduction of the amount of full-time employment in February. Slightly fewer persons were engaged in nonagricultural pursuits in February. This decline was due in part to the seasonal return of men from non-agricultural jobs to farming. Total agricultural employment was up slightly in February.

Total employment at 55,520,000 in February was 4,250,000 more than a year ago, according to the U. S. Bureau of the Census. Almost all of this increase in total employment was in non-agricultural lines. Women leaving

Employment

Millions of Persons; U. S. Bureau of Census

	1944	1945	1946	1947
January	50.4	50.1	51.0	55.4
February	50.3	50.6	51.2	55.5
March	50.5	50.8	52.5	
April	51.3	51.2	54.1	
May	52.0	51.3	54.9	
June	53.2	52.1	56.4	
July	54.1	54.4	57.8	
August	55.2	54.6	57.7	
September	52.3	51.4	57.1	
October	52.2	51.6	57.0	
November	51.5	51.5	57.0	
December	50.6	51.2	56.3	

* New series.

Wholesale Commodity Prices

Index: 1926 = 100; U. S. Bureau of Labor Statistics

	1944	1945	1946	1947
January	103.3	104.9	107.1	141.5
February	103.6	105.2	107.7	144.9*
March	103.8	105.3	108.9	
April	103.9	105.7	110.2	
May	104.0	106.0	111.0	
June	104.3	106.0	112.2	
July	104.1	105.9	112.7	
August	103.9	105.7	112.1	
September	104.0	105.2	112.0	
October	104.1	106.4	114.1	
November	104.4	106.5	119.7	
December	104.7	107.1	140.9	

* Approximation; figure from quoted source not available.

Consumers' Price Index

Index: 1913-1914 = 100; U. S. Bureau of Labor Statistics

	1944	1945	1946	1947
January	124.2	127.1	129.9	153.1
February	123.8	126.9	129.6	153.4*
March	123.8	126.8	130.2	
April	124.6	127.1	131.1	
May	125.1	128.1	131.7	
June	125.4	129.0	133.3	
July	126.1	129.4	141.8	
August	126.4	129.3	144.1	
September	126.5	128.9	145.9	
October	126.5	128.9	148.6	
November	126.6	129.3	152.2	
December	127.0	129.9	153.3	

* Approximation; figure from quoted source not available.

farm work have been replaced by men and agricultural employment in February equalled that of a year ago. Unemployment increased by 90,000 persons to 2,490,000 in February, but was 160,000 persons less than the number unemployed a year ago. Layoffs and partial shutdowns of plants caused a weekly average of about 185,000 persons to file initial unemployment compensation claims. The low number of labor management disputes in February resulted in the smallest loss in working time for any month since the end of the war. A year ago steel, automotive, and electrical workers' strikes resulted in the largest recorded number of man-days idle.

Income Less income is usually received by individuals in February than in any other month

of the year. Preliminary figures indicate that there was a less than seasonal drop in income payments from January to February of this year, and that total income, seasonally adjusted, was at an all-time high, more than 10 per cent above the level of a year ago.

By February income received by those engaged in agricultural pursuits, which was about 10 per cent of total income, was 2.4 times the monthly average of income in 1941. Income payments to individuals in nonagricultural lines were almost 1.8 times the 1941 monthly average. Although salaries and wages, after adjustments for seasonal variations, had not reached war-time peaks by the first months of 1947, the gains in income received by individuals in dividends and interest or income received by owners of unincorporated businesses helped push total

nonagricultural income payments, seasonally adjusted, to record heights.

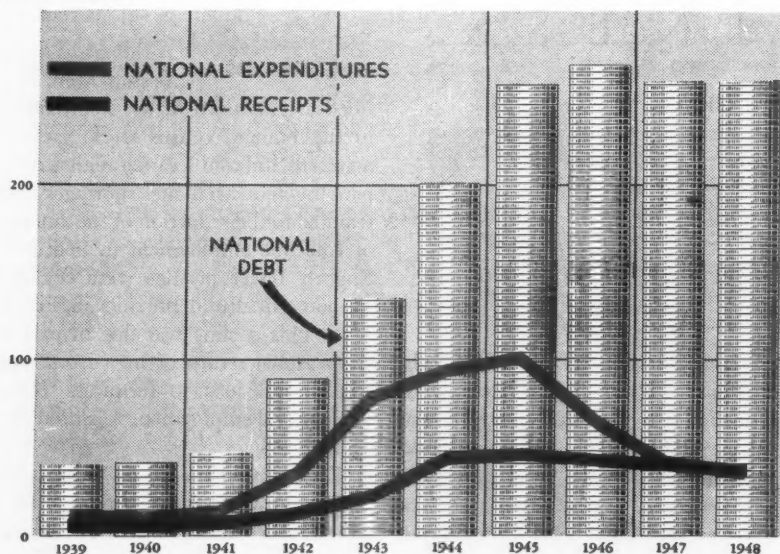
Average weekly earnings of those on the payrolls in manufacturing industries were expected to remain close to \$47 in February, which was only slightly below the war-time peak reached when the average weekly hours worked were longer. Although industrial fuel shortages in some areas caused a slight drop from January to February in the average number of hours worked, the record hourly earnings averaging more than \$1.15 helped maintain weekly earnings.

Prices The upward spurt in prices following the demise of OPA controls lost some of its momentum during December and January but gained more velocity again in February and the first part of March. Wholesale commodity price increases in all major commodity groups during February raised the over-all price level about 33 per cent above that of a year before.

The downward trend in prices of foods and farm products evident during January was reversed in February. Snow and sleet held up shipments of many commodities thus increasing the intensity of demand and forcing prices close to post-decontrol peaks. The Government's plans for export allocations of the largest amount of grain since mid-1945 caused prices to rise substantially. Hogs, large numbers which were slaughtered during last Summer's sharp price rise, cost considerably more in February. Prices of commodities other than food and farm products continued to rise steadily, a tendency which has been under way since the removal of price ceilings. Hide and leather prices increased chiefly because of higher hide export quotas and of the usual Spring decline in cattle slaughter. A speculative demand for

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silver by foreign brokers resulted in a rise of more than 10 cents in the price of silver in the United States. Steel scrap, now being bought at distant points, continued to increase in price during February.

In January the cost-of-living, as measured by the consumers' price index of the U. S. Bureau of Labor Statistics, declined for the first time in eleven months. A later estimate than the one on the chart indicated that the cost-of-living by mid-February was down again.

Trade Extremely bad weather conditions in many sections of the country combined with a tendency on the part of consumers to limit purchases of high priced goods reduced the dollar volume of retail sales in February below that in January. The unit volume of retail sales dropped slightly below that in the corresponding 1946 month; high prices kept the dollar volume somewhat above that of a year ago.

Recently individuals have been spending the same percentage of monthly income for retail goods as in pre-war years. A slightly larger per-

WHOLESALE FOOD PRICE INDEX

The index is the sum total of the price per pound of 31 commodities in general use:

1947	1946	1947
Mar. 25.. \$6.56	Mar. 26.. \$4.18	High Mar. 4.. \$6.77
Mar. 18.. 6.70	Mar. 10.. 4.18	Low Jan. 28.. 6.18
Mar. 11.. 6.70	Mar. 12.. 4.17	
Mar. 4.. 6.77	Mar. 5.. 4.17	1946
Feb. 25.. 6.63	Feb. 26.. 4.16	High Nov. 10.. \$6.40
Feb. 18.. 6.47	Feb. 10.. 4.13	Low Jan. 22.. 4.12

DAILY WHOLESALE PRICE INDEX

The index is prepared from spot closing prices of 30 basic commodities (1930-1932 = 100).

	Mar.	Feb.	Jan.	Dec.	Nov.
1....	256.96	236.55	*	†	232.56
2....	†	†	242.26	230.82	230.21
3....	257.99	237.84	244.37	240.30	†
4....	257.89	239.37	244.53	240.52	234.25
5....	258.01	240.32	†	239.59	*
6....	261.13	240.56	243.71	241.36	233.05
7....	261.06	241.03	243.75	241.61	231.83
8....	262.36	242.31	244.33	†	233.65
9....	†	†	243.14	241.13	233.81
10....	263.46	244.37	241.78	240.85	†
11....	263.34	244.96	241.77	242.83	*
12....	264.22	*	†	242.28	235.34
13....	268.49	244.78	240.87	243.36	236.13
14....	266.20	245.22	240.37	244.35	238.38
15....	268.14	245.88	239.59	†	238.59
16....	†	†	238.48	244.88	239.09
17....	268.04	246.84	236.77	243.55	†
18....	260.25	247.05	235.81	246.48	230.64
19....	265.82	248.20	†	244.90	240.15
20....	264.84	248.76	235.68	245.23	241.05
21....	263.89	248.89	234.65	245.00	239.79
22....	264.30	*	233.78	†	240.00
23....	†	†	232.80	245.59	240.16
24....	267.63	250.58	233.36	246.34	†
25....	268.03	252.43	233.11	*	240.07
26....	269.13	252.10	†	245.75	240.36
27....	266.94	253.55	233.75	245.76	239.87
28....	.....	254.70	233.05	244.30	*
29....	.....	.....	235.30	†	240.74
30....	.....	.....	235.88	243.40	240.47
31....	235.82	243.35

† Sunday. * Markets closed.

BLIND SPOTS IN MANAGEMENT TRAINING

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HAVE OVERCOME THEIR DEFICIENCIES
THROUGH THIS OUTSTANDING COURSE
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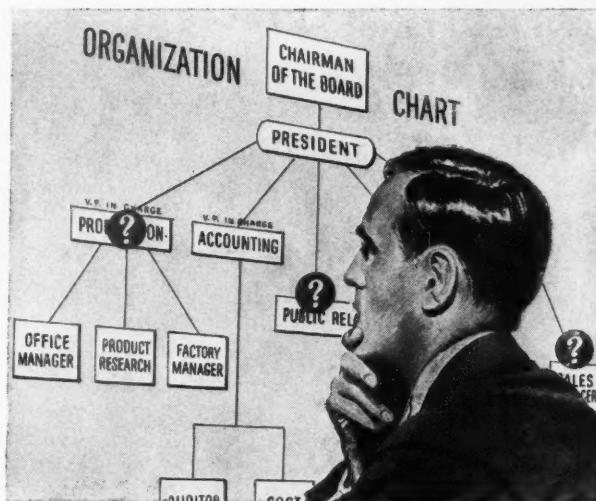
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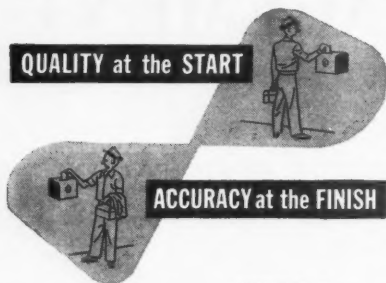
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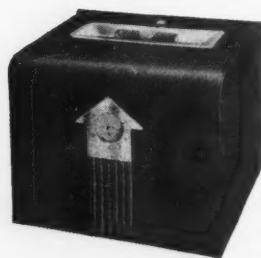
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Retail Sales

Seasonally Adjusted Index: 1935-1939 = 100. U. S. Department of Commerce

	1944	1945	1946	1947
January	175.6	193.3	237.6	277.5
February	173.9	193.9	243.7	268*
March	177.9	196.4	241.8	
April	186.6	180.6	236.9	
May	174.5	184.6	238.7	
June	174.4	180.6	247.5	
July	179.4	196.2	261.4	
August	180.7	195.2	256.5	
September	179.1	185.0	260.3	
October	185.0	220.1	273.0	
November	192.7	216.8	270.1	
December	187.7			

* Approximation; figure from quoted source not available.

centage of total expenditures at present continues to go for nondurable goods than in the immediate pre-war period. During February, sales volume in all groups of stores was more than twice the 1935-1939 average. Sales in eating and drinking places, food, home-furnishing, jewelry, and apparel stores were between 4 and 5 times the 1935-1939 average. The volume of sales in all of these stores except food and home-furnishing has been moving downward, however, in recent months.

Currently inventories in all retail stores combined were valued below or only slightly above the sales for the month; in pre-war years inventories were usually equivalent to much more than one month's sales volume.

In February buyers in most wholesale markets restricted their orders to immediate needs. Any advance ordering was done cautiously, as buyers found it more difficult to move high-priced goods quickly. The dollar volume of sales at the wholesale level was seasonally low in February and moved upward in the early part of March as ordering of Spring and Summer items increased. End of the month inventories held by wholesalers continued the upward movement started more than a year ago, but they continued to form a smaller ratio of monthly sales than in the years immediately before the war.

Finance Unable to finance the war entirely by taxation, the United States Government resorted to borrowing and as an outcome of the sales of Government securities the public debt rose from \$43.0 billion for the fiscal year ended June 30, 1940 to \$269.4 billion for 1946. The debt would stand at \$260.2 billion by June 30, 1948, according to the President's budget message of January 10, 1947. The sharp rise in national expenditures during the war years was barely paced by receipts;

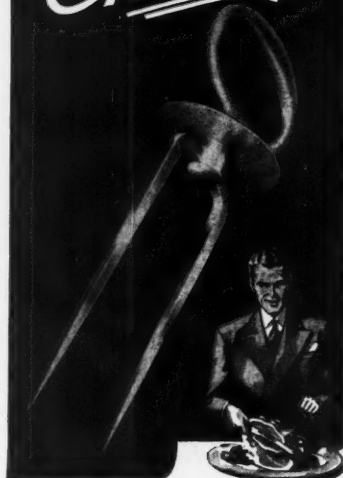
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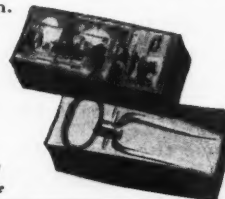
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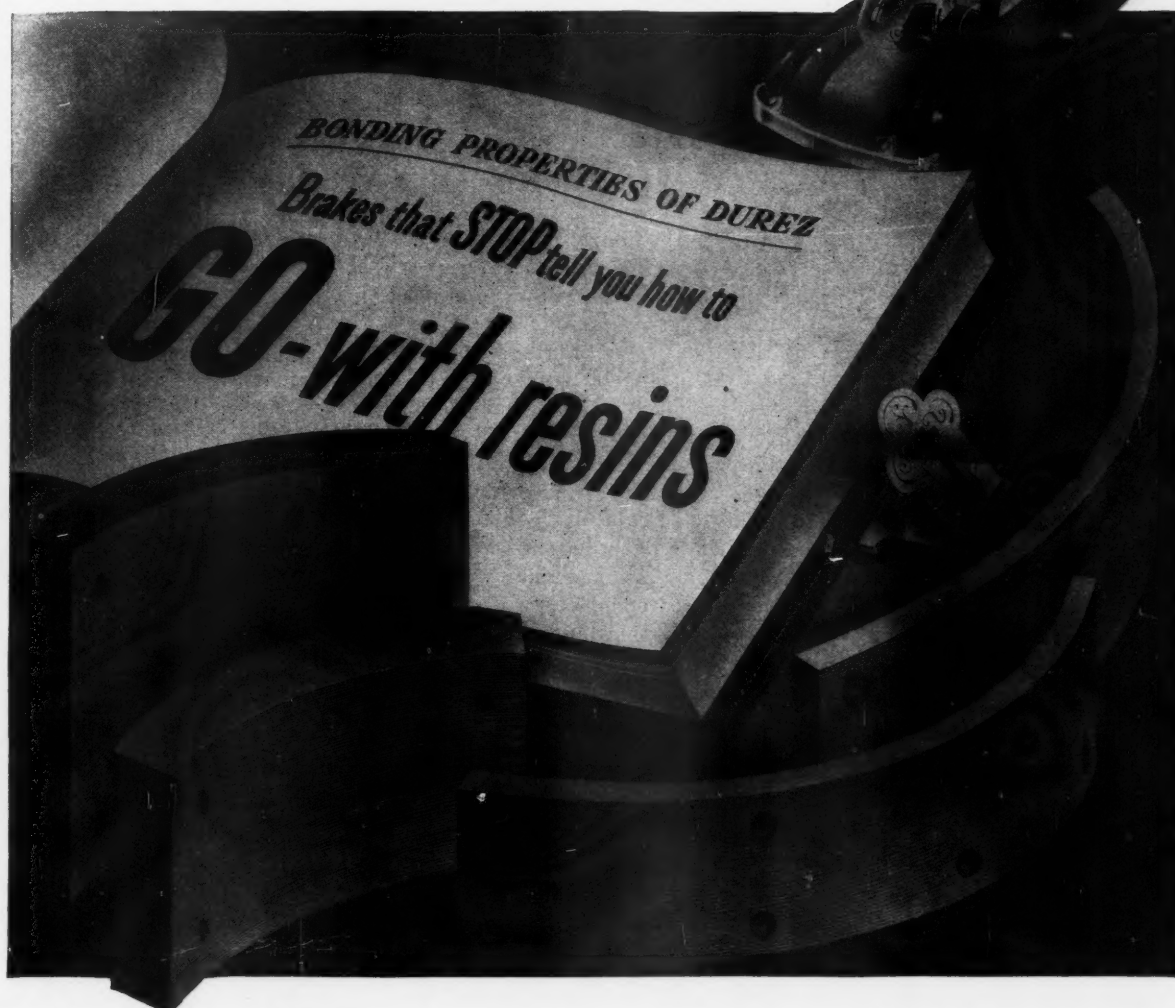
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But Durez doesn't. Because Durez produces the phenolic resins that bond the materials of brake linings, brake blocks, and clutch facings into a unified whole, we feel a responsibility with manufacturers to pursue without letup our search for improvements.

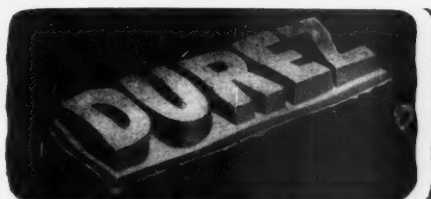
You may be surprised to know in how many ways Durez bonding agents

enhance the performance of the complete product. In brake linings, Durez adds measurably to frictional characteristics, heat resistance and wearing quality. It augments imperviousness to water, oil, and grease, and in certain types of linings it even reduces the tendency of brakes to "fade."

The versatility of Durez industrial resins is no less valuable elsewhere. In grinding wheels their high strength and heat resistance permit higher speeds and faster cutting. Their dielectric

strength and resistance to solvents, mild acids, and alkalis have solved problems in the electrical, plywood, and other industries.

We have prepared a brief, informative study to show you the numerous directions in which manufacturers are breaking new ground with these industrial resins . . . and the reasons why. We'll gladly mail you a copy. Write for "Durez Industrial Resins." Durez Plastics & Chemicals, Inc., 14 Walck Road, North Tonawanda, New York.



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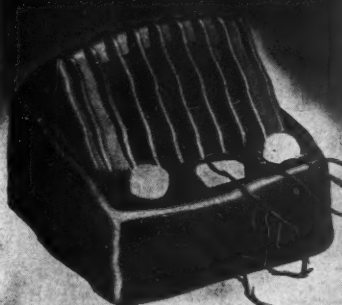
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Industrial Stock Prices

Monthly Average of Daily Index, Dow-Jones

	1944	1945	1946	1947
January	137.74	153.95	199.00	176.10
February	135.97	157.13	199.30	181.54
March	139.07	157.24	194.30	
April	137.19	160.47	205.80	
May	139.22	165.58	206.63	
June	145.46	167.33	207.34	
July	148.37	169.00	202.27	
August	146.72	166.16	199.44	
September	145.20	177.96	172.72	
October	147.00	185.07	169.48	
November	148.88	190.22	168.04	
December	150.35	192.74	174.38	

should the President's budget remain unchanged by Congress, not until 1948 would even a slight surplus be received by the Government, as shown on the chart on page 30.

After the debt reached an all-time peak in February 1946, the Government embarked on a program of debt reduction. There was a \$23 billion decline in the interest bearing debt in 1946, which was extended further in the first quarter of 1947. Although almost all of the reduction was in security holdings of banks, the large volume of outstanding securities still held by banks continued to support a large money supply. Borrowing from banks increased in February, although the rise in business loans was not as sharp as it had been in previous months.

(Continued on page 38)

NEW BUSINESS INCORPORATIONS

	Jan. 1947	Dec. 1946	Nov. 1946	Jan. 1946
Alabama	145	78	74	40
Arizona	72	63	46	72
Arkansas	47	31	40	54
California	832	604	623	775
Colorado	80	59	63	88
Connecticut	108	107	156	242
Delaware	284	244	211	336
Florida	287	206	310	329
Georgia	184	142	129	77
Idaho	26	20	9	23
Illinois	730	608	473	820
Indiana	205	107	138	178
Iowa	96	64	71	70
Kansas	74	113	37	65
Kentucky	95	81	60	85
Louisiana	110	68	179	138
Maine	64	67	40	57
Maryland	221	151	110	209
Massachusetts	458	542	305	560
Michigan	451	284	227	420
Minnesota	152	138	92	150
Mississippi	79	63	70	66
Missouri	170	195	110	232
Montana	53	40	31	24
Nebraska	61	72	37	54
Nevada	45	72	52	37
New Hampshire	40	40	27	28
New Jersey	628	682	501	806
New Mexico	37	30	20	22
New York	3,113	2,634	2,330	4,289
North Carolina	260	176	136	201
North Dakota	13	11	6	10
Ohio	732	648	350	543
Oklahoma	82	75	65	54
Oregon	117	100	93	88
Pennsylvania	401	316	249	277
Rhode Island	120	71	60	146
South Carolina	92	74	13	100
South Dakota	23	25	26	24
Tennessee	115	72	94	160
Texas	201	128	320	213
Utah	48	41	33	47
Vermont	26	31	10	24
Virginia	184	120	106	144
Washington	182	170	115	176
West Virginia	113	56	46	133
Wisconsin	264	228	121	182
Wyoming	20	36	13	22

Total 48 States..... 12,097 9,944 8,485 13,006

* Preliminary. † Revised.

Profits Are People

The quality and quantity of a day's work often depends on more than just the size of the worker's pay envelope. The man at the machine, no less than the man at the board meeting, wants individual recognition . . . and pushes himself if there is an opportunity to achieve it.

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a Company Serving Innumerable Human Needs

From a small producer of bromine in 1889 the Dow Chemical Company has become one of the nation's largest producers of chemicals. Today Dow products number in the hundreds, serve innumerable human needs.

Good management, continuing research and sound financing were required for that growth and diversification. In the development of its financial program, Smith, Barney & Co. has long assisted Dow Chemical Company through underwriting and distributing securities to provide the capital essential for Dow's progress and expansion.

The beginning

Brine of unusual bitterness underlies a large area near Midland, Michigan. To the salt maker of 1889 it was too full of impurities for salt-making. But to a youthful chemist of that day, Herbert H. Dow, it was the raw material needed for his new process for recovering bromines from saline solutions. He built a tiny plant—and founded the now famous Dow Chemical Company.

The brine wells still flow . . .

...and brine is still the important basic raw material of Dow Chemical Company—now directed by the founder's son, Dr.

Willard H. Dow, eminent scientist and administrator. Today the original few products of 1889 are myriad as persistent research sweeps back chemical frontiers: chlorine for organic chemicals, bromides for photography and for knockless gasoline, chlorinated hydrocarbons for solvents, magnesium for light-weight products, calcium chloride for dustless roads and dustless coal, plastics—these are but a few. New products are being constantly added in the many Dow plants and laboratories located throughout the country.

Growth implemented by capital

Capital has been required for the expansion of Dow Chemical Company from its small beginnings to its present position in the chemical field. To provide capital, Smith, Barney & Co. since 1936 has underwritten no less than six issues of Dow securities. These have provided funds for growth and for redemption, with savings to the company, of outstanding securities.

From this combination of brine, brains and capital much has been created—Dow provides directly more than 13,000 jobs—products of Dow have been the basis

for creation of many new industries, as well as the expansion of older ones, indirectly making countless other jobs to help build a better America. Of immeasurable value are the resulting contributions to society through products that have enriched our daily living and done much to help this nation progress to the world's highest standard of living.

Advantages to you

The advantages derived from the relationship between Dow Chemical Company and Smith, Barney & Co. have been duplicated many times in the long history of this firm, and its antecedent firms. We are prepared to render equally valuable service to others. To tell you more of the facilities provided by our firm, we have prepared a booklet entitled "What Smith, Barney & Co. Offers You." A copy may be obtained on request to Smith, Barney & Co., 14 Wall Street, New York 5, N. Y., Department M.

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The gradual recovery of stock prices early in February was only temporary. New rises in commodity prices and news of Great Britain's economic difficulties engendered uncertainty which financial reports of large corporate profits and dividends were unable to counteract. The 25 per cent credit allowed on security purchases did not bring new public participation in any sizable volume. The Dow-Jones industrial stock prices averaged slightly higher for the month of February than for January, due primarily to the gains early in the month.

Failures Business failures, rising for the third consecutive month, totalled 238 in February, the largest number in any month in three and a half years. While February is usually the high month of the year for failures, the increase from the January level was three times as sharp as the usual seasonal upswing. Concerns failing more than doubled the number occurring in February a year ago, but comprised only a sixth of the total registered for the same month in pre-war years. Approximately 80 per cent of the concerns failing in February started in business in 1942 or later; ap-

BANK CLEARINGS—INDIVIDUAL CITIES (Thousands of dollars)

	February		% Change
	1947	1946	
Boston	1,647,136	1,559,779	+ 5.6
Philadelphia	3,253,000	2,831,000	+14.9
Buffalo	293,373	232,754	+26.0
Pittsburgh	906,895	908,360	+ 0.7
Cleveland	1,038,444	826,494	+25.6
Cincinnati	638,581	528,354	+20.9
Baltimore	738,125	681,667	+ 8.3
Richmond	431,865	345,533	+25.0
Atlanta	792,600	665,300	+19.1
New Orleans	435,261	380,502	+14.4
Chicago	2,609,213	2,271,486	+14.9
Detroit	1,281,270	1,076,067	+19.0
St. Louis	958,021	745,329	+28.7
Louisville	437,100	347,014	+26.0
Minneapolis	785,771	781,816	+ 0.5
Kansas City	1,069,518	866,584	+23.4
Omaha	413,383	352,090	+17.4
Denver	344,415	285,050	+20.8
Dallas	755,372	614,824	+22.9
Houston	604,760	488,202	+23.0
San Francisco	1,462,040	1,333,016	+ 9.7
Portland, Ore.	362,632	293,419	+23.6
Seattle	383,218	341,074	+12.4
Total 23 Cities	21,733,693	18,756,525	+26.5
New York	27,041,250	26,646,339	+ 1.5
Total 24 Cities	48,774,952	45,402,864	+ 7.4

BUILDING PERMIT VALUES—215 CITIES

Geographical Divisions:	February		% Change
	1946	1947	
New England	\$7,677,405	\$21,377,487	+64.1
Middle Atlantic	37,666,654	27,282,072	+37.8
South Atlantic	22,113,507	18,013,384	+16.0
East Central	27,196,010	39,386,704	+31.0
South Central	23,212,280	34,778,071	+33.3
West Central	6,620,688	10,753,351	+38.4
Mountain	3,052,837	5,082,495	+22.2
Pacific	38,166,058	41,112,979	+ 7.2
Total U. S.	\$166,545,448	\$198,686,543	+16.2
New York City	\$29,922,017	\$18,382,683	+62.8
Outside N. Y. City ..	\$136,623,431	\$180,303,860	+24.2



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proximately 28 per cent began operations in 1946. The Failure Index, showing an annual rate of about twelve failures per 10,000 enterprises, reached the highest level for February in four years.

Liabilities involved in the month's failures aggregated \$12,976,000, the heaviest amount in February since 1941. More failures occurred in all size groups than in the comparable month of 1946. The sharpest rise came in the exceptionally large failures with liabilities above \$100,000, which were five times as numerous as a year ago. Concerns failing with liabilities in the \$25,000-\$100,000 class out-numbered those in the previous February four to one. The only exception to the marked increase from the 1946 level appeared in the smallest size group where losses amounted to less than \$5,000 per failure. These small failures have continued below 50 in every month since 1944, whereas in pre-war years they averaged about 500 per month.

Within manufacturing, all major industries had at least one concern failing. But two-thirds of the failures in this group were concentrated in five

(Continued on page 44)

FAILURES BY DIVISIONS OF INDUSTRY

	(Current liabilities in thousands of dollars)		(Number Jan.-Feb. 1947 1946)		(Liabilities Jan.-Feb. 1947 1946)	
	1947	1946	1947	1946	1947	1946
MINING, MANUFACTURING...	159	64	18,674	2,551		
Mining—Coal, Oil, Misc....	2	..	42	..		
Food and Kindred Products...	7	4	2,104	101		
Textile Products, Apparel...	11	12	772	221		
Lumber, Lumber Products...	24	13	1,278	350		
Paper, Printing, Publishing...	6	2	215	66		
Chemicals, Allied Products...	10	4	1,086	94		
Leather, Leather Products...	7	..	320	..		
Stone, Clay, Glass Products...	5	..	364	..		
Iron, Steel, and Products...	12	1	1,641	75		
Machinery	27	11	4,030	739		
Transportation Equipment...	7	5	2,870	386		
Miscellaneous	41	12	2,452	435		
WHOLESALE TRADE	61	12	3,851	904		
Food and Farm Products...	11	7	1,657	850		
Apparel	4	..	125	..		
Dry Goods .....	..	..	..	..
Lumber, Bldg. Mats., Hdwr.	4	..	67	..		
Chemicals and Drugs	2	..	44	..		
Motor Vehicles, Equipment...	3	..	41	..		
Miscellaneous	37	5	1,917	54		
RETAIL TRADE	146	40	3,070	503		
Food and Liquor	27	8	475	60		
General Merchandise	8	4	110	20		
Apparel and Accessories...	29	11	414	90		
Furniture, Furnishings...	17	3	342	37		
Lumber, Bldg. Mats., Hdwr.	4	1	55	4		
Automotive Group	10	5	232	12		
Eating, Drinking Places...	20	11	1,033	160		
Drug Stores	2	2	25	6		
Miscellaneous	20	5	375	105		
CONSTRUCTION	35	22	1,341	370		
General Bldg. Contractors...	0	4	649	150		
Building Sub-contractors...	23	15	354	211		
Other Contractors	3	..	338	..		
COMMERCIAL SERVICE	30	25	1,233	3,027		
Highway Transportation...	17	7	744	2,732		
Misc. Public Services	1	..	8	..		
Hotels .....	..	..	..	..
Cleaning, Dyeing, Repairs...	5	2	285	8		
Laundries	2	2	30	202		
Undertakers	1	..	13	..		
Other Personal Services...	3	5	32	10		
Business, Repair Service...	10	0	121	66		

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Some salesmen can tell a story well, enjoy listening to and laughing at a customer's joke. Yet they cannot see humor in situations involving themselves or their organization. They cannot take "kidding". This trait can often cost not only the immediate sale—it may mean the loss of future business.

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NOTE: Inquiries as to rates for listings on this page should be addressed to Charles E. Darby, Canadian Advertising Representative, Dun's Review, 159 Bay St., Toronto, Ontario, Canada; or any office of Dun & Bradstreet of Canada, Ltd. P. O. Box Numbers indicated by (B xxx).

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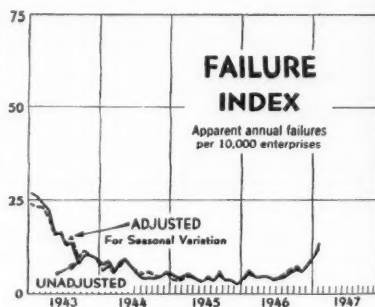
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industries—machinery with seventeen, lumber with fourteen, iron and steel with eight, nonferrous metals with ten, and toys with eight (the latter two lines are included in the "Miscellaneous" category). More machinery manufacturers failed than in any month since April of 1939. In wholesaling the largest number of the failing concerns were engaged in the food trade where eight operators went out of business with loss to creditors. During February, four retail lines—food, apparel, furniture, and eating and drinking places—had ten or more failures. In all four of these retail trades, failures were at least twice as numerous as in the previous February. Other kinds of business where failures numbered ten or more included building sub-contracting in the construction field and transportation in commercial service.

Not only did a large number of failures occur in manufacturing in February; \$7,654,000 of the total liabilities of \$12,976,000 were concentrated in this one industry group where losses bulked eight times as heavy as in last February. The losses involved in three individual manufacturing lines—food, iron and steel, and machinery—exceeded one million dollars. One wholesale line—food—incurred liabilities topping the million mark.



THE FAILURE RECORD

	Feb. 1947	Jan. 1947	Feb. 1946	Per Cent Change
DUN'S FAILURE INDEX *				
Unadjusted	13.8	10.2	6.1	+126
Adjusted, seasonally....	11.8	9.3	5.3	+123
NUMBER OF FAILURES.....	238	202	92	+159
NUMBER BY SIZE OF DEBT				
Under \$5,000.....	33	38	20	+31
\$5,000-\$25,000.....	108	95	41	+161
\$25,000-\$100,000.....	65	36	16	+306
\$100,000 and over.....	30	33	6	+400
NUMBER BY INDUSTRY GROUPS				
Manufacturing	92	67	29	+217
Wholesale Trade.....	34	27	9	+278
Retail Trade.....	70	76	27	+159
Construction	20	15	14	+41
Commercial Service.....	22	17	13	+69
LIABILITIES (in thousands)				
CURRENT	\$12,976	\$15,193	\$2,983	+335
TOTAL	12,976	15,193	2,983	+335

* Apparent annual failures per 10,000 enterprises, formerly called DUN'S INSOLVENCY INDEX.

† Per cent change of February 1947 from February 1946.



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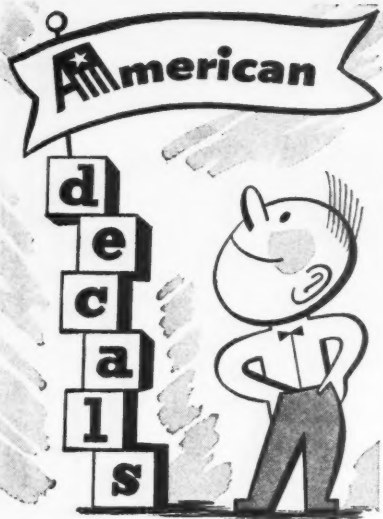


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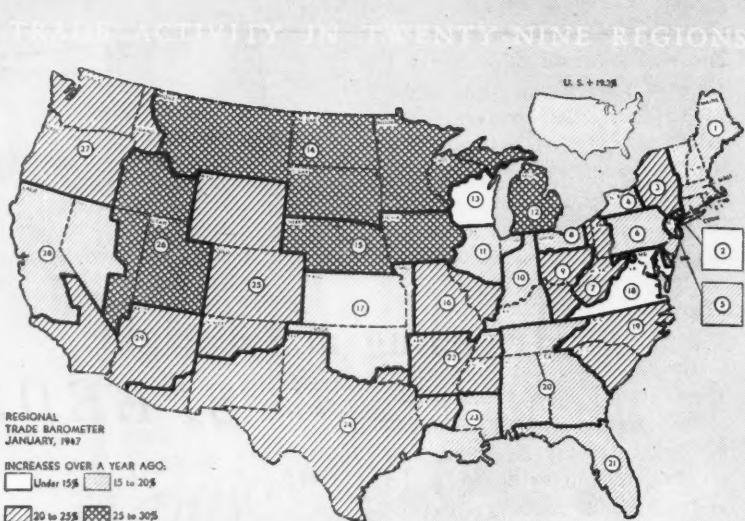
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RETAIL VOLUME HIGH

The United States Trade Barometer (seasonally adjusted) fell to 252.6 in February from 256.7 in January. Regional trade activity is reported by the local DUN & BRADSTREET offices.

HILE unseasonal weather and the continued resistance of many consumers to high prices adversely affected retail trade, the January decline was less than usual. Total retail dollar volume fell nearly 24 per cent to \$7.9 billion from the all-time high of \$10 billion in December (U. S. Department of Commerce); it was 18 per cent above that of a year ago and more than double the corresponding 1940 dollar figure.

Consumer purchases of commodities in January as measured by the DUN'S REVIEW Trade Barometer rose 1.2 per cent to 256.7 from 253.6 in December (1935-1939=100), after adjustment for seasonal variations and the number of business days in the month. The barometer was 19.3 per cent above the 215.1 in January 1946.

The preliminary barometer for February declined 1.6 per cent to 252.6; consumer purchases of commodities were curtailed in many sections by adverse weather. A strong resistance to high prices remained very much in evidence.

The January barometer of each of the 29 regions was above that of a year ago for the third straight month. The sharpest increase above January 1946

was 29.1 per cent in the Minneapolis and St. Paul Region (14); other large gains were 26.7 per cent in the Iowa and Nebraska Region (15) and 26.5 per cent in the Salt Lake City Region (26). The smallest increase was 5.7 per cent in the New York City Region (2) followed by 12.4 per cent in the Maryland and Virginia Region (18).

The highest monthly increase in the January barometers was 10.4 per cent in the Iowa and Nebraska Region (15); in all other regions the monthly change was less than 10 per cent. The second largest increase above December was 8 per cent in the Kansas City Region (17). In ten regions the barometers were below those of the previous month; the sharpest declines were 5.7 per cent in the Florida Region (21) and 5.5 per cent in the Northern New Jersey Region (5).

Industrial production was maintained at a very high level in almost all regions during January. Cold weather at the end of the month hampered outdoor work; the diversion of gas for home heating limited the supply available to industrial users in the Pittsburgh Region (7) and in the Cleveland Region (8).

(Regional reports begin on page 48)

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- 4 Test SoundScriber equipment against any known dictating system of any type. Its quick convenience, its saving of time and money, and its modest cost—the lowest in the dictation machine industry—will revolutionize *your* thinking about machine dictation, too! Mail the coupon today!

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TRADE ACTIVITY IN TWENTY-NINE REGIONS (Continued)

REGIONAL TRADE BAROMETERS

REGION	% Change from		
	Jan. 1947	Jan. 1946	Dec. 1946
United States	256.7	+19.3	+ 1.2
1. New England	201.0	+15.7	+ 2.0
2. New York City	221.5	+ 5.7	+ 5.0
3. Albany, Utica, Syracuse	258.0	+23.6	+ 1.8
4. Buffalo, Rochester	241.6	+15.4	+ 2.2
5. Northern New Jersey	200.9	+15.5	+ 5.5
6. Philadelphia	241.6	+19.2	+ 6.7
7. Pittsburgh	219.6	+21.9	+ 1.7
8. Cleveland	252.1	+19.8	+ 1.4
9. Cincinnati, Columbus	263.3	+20.5	+ 0.4
10. Indianapolis, Louisville	292.5	+19.4	+ 6.4
11. Chicago	240.6	+16.5	+ 2.3
12. Detroit	250.0	+25.0	+ 2.0
13. Milwaukee	267.0	+13.0	+ 0.1
14. Minneapolis, St. Paul	270.5	+29.1	+ 5.0
15. Iowa, Nebraska	275.9	+26.7	+10.4
16. St. Louis	253.0	+23.1	+ 1.0
17. Kansas City	276.4	+18.8	+ 8.0
18. Maryland, Virginia	252.7	+12.4	+ 0
19. North, South Carolina	201.9	+21.4	+ 4.8
20. Atlanta, Birmingham	330.2	+15.3	+ 6.1
21. Florida	319.6	+16.1	+ 5.7
22. Memphis	302.8	+20.1	+ 4.6
23. New Orleans	285.5	+16.5	+ 2.3
24. Texas	312.7	+20.8	+ 2.1
25. Denver	280.7	+24.9	+ 4.5
26. Salt Lake City	310.2	+26.5	+ 1.2
27. Portland, Seattle	319.4	+24.6	+ 4.9
28. San Francisco	273.5	+18.5	+ 2.0
29. Los Angeles	286.2	+20.4	+ 1.4

The Regional Trade Barometers are seasonally adjusted: 1935-1939 = 100.

Regional trade information is based upon opinions and comments of business men gathered and weighed by the local DUN & BRADSTREET offices. Payroll and employment data are from Government sources. Most of the information summarized here represents final figures for January.

Department store sales are from the Federal Reserve Board and are for the four weeks ended March 1, 1947.

More complete barometer figures and more detailed regional information is published in DUN'S STATISTICAL REVIEW.

HIGHLIGHTS OF TRADE ACTIVITY

1. New England Region

Barometer gain over a year ago below U. S. gain; barometer next to lowest of the 29 regions, 22% below U. S. Wholesale trade 10% above a year ago. New England manufacturing employment 14% above a year ago; Vermont and New Hampshire at new peaks. Newspaper advertising lineage 15% above a year ago in Boston. Hartford, New Haven. Strike halted shoe production in Brockton in February. Worst output very high; minor decline in woolen production.

2. New York City Region

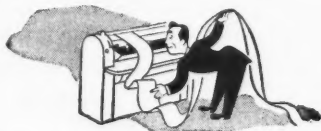
Barometer increase over a year ago the smallest of all regions, monthly gain among the highest: was 14% below U. S. average. Wholesale trade 10% above a year ago in Bridgeport. Total employment steady at high level; Bridgeport payrolls 29% above a year ago. New York hotel sales 6% above a year ago; up 3% in U. S.; newspaper advertising lineage up 21%. Snow and cold weather in February restricted outdoor work and adversely affected retail volume. Consumer price resistance remained noticeable.

NEW! THE OZALID STREAMLINER



- Reproduces typed, drawn, printed, or photographic material in seconds—without stencils.
- Moderately priced... designed for the thousands of offices, drafting rooms, schools and colleges that want these 5 EXTRA VALUES in Printmaking—

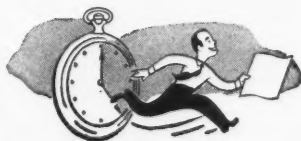
1. EFFICIENCY! Type, draw, or print in usual manner on ordinary translucent paper... and that's your "MASTER," ready to turn out as many reproductions as you need.



No stencils to cut... no smearing... no special filing cabinets... practically no limitations as to size. Your originals can be up to 42 inches wide, any length. A manifold accounting machine report a hundred yards long is no problem!

Simply feed it into the Streamliner on a roll of Ozalid sensitized paper—instead of on Ozalid cut sheets.

OZALID PRINTS are delivered completely dry, ready for immediate use—the same size as your original.



2. SPEED! ONLY 25 seconds to reproduce your standard-size originals as easy-to-read positive (not negative) prints.

3. ECONOMY! An 8½ x 11-inch reproduction costs you one cent; 11 x 17 inches, two cents... and so on. The Ozalid Streamliner soon pays for itself... in time, labor, and dollars saved.

With it, you can establish new, economical business systems—use trans-



lucent records, file cards, ledgers... get prints in seconds, whenever needed.

4. VERSATILITY! You can reproduce the lines and images of any original in black, blue, red, sepia, or yellow... on paper, cloth, foil, film, or plastic.

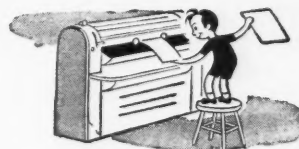
Simply use the Ozalid sensitized material you think best for job at hand; e.g., use black-line paper to match original typing... **DRYPHOTO** to produce



beautiful continuous-tone prints from film positives (which can be made from

any negative)... **OZAPLASTIC** to produce oilproof, waterproof prints for salesmen's booklets, etc. All prints are made in same fast, economical manner.

5. SIMPLICITY! NOW — printmaking is an easy desk job, automatic in practically every detail.



Anyone can feed originals and sensitized material into the Ozalid Streamliner. Prints are delivered on top, stacked in order—within easy reach of the operator, who does not have to leave her chair.

You can install your Streamliner anywhere; it requires only 11 square feet of floor space.

Write today for free, illustrated booklet... showing all the ways you can use the new **OZALID STREAMLINER**... and containing actual reproductions — like those you can make.

Gentlemen:

DEPT. 250

Please send New Ozalid Streamliner booklet... containing reproductions of drawn, typed, printed, and photographic material. No obligation.

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Position _____

Company _____

Address _____

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DIVISION OF
GENERAL ANILINE AND FILM CORPORATION
Johnson City, New York

Ozalid in Canada
Hughes Owens Co., Ltd., Montreal



the
**State of Missouri
offers a premium
in Industrial
Opportunities!**

Missouri is the most diversified manufacturing state in the nation and has a wealth of labor skills. The most recently available U. S. Employment Service survey indicated that of the more than one hundred thousand applications on file, 18% represented skilled labor and 26% semi-skilled. Employer-employee relations are enviably amicable, too, with only 7.7% of Missouri labor participating in strikes in the peak strike year of 1945. This percentage is particularly revealing when compared to the percentages of other industrial states.

Specialized, confidential service to industrialists. Write direct: Missouri State Division of Resources and Development, Jefferson City, Missouri, Dept. T-71.



(70)

3. **Albany, Utica, and Syracuse Region**
Barometer gain over a year ago above U. S. increase, moderate monthly drop; was close to U. S. barometer. Albany wholesale trade 15% below a year ago, up 6% in Syracuse. Manufacturing employment up 1%; total employment slightly below December levels. Factory payrolls in Syracuse at all-time peak in February, 23% above a year ago. Prices of some farm products rose slightly.

4. **Buffalo and Rochester Region**
Barometer increase over a year ago less than U. S. gain, small monthly decline; was 6% below U. S. barometer. Wholesale volume slightly above a year ago in Buffalo, down 3% in Rochester. Manufacturing employment unchanged from December in Buffalo, down slightly in Rochester. Buffalo steel production in February at 102% of capacity.

5. **Northern New Jersey Region**
Barometer gain over a year ago less than U. S. gain, monthly drop next to sharpest of all regions; was 22% below U. S. barometer. Newark wholesale trade 8% above a year ago. Industrial employment and payrolls 13 and 24% above a year ago in Elizabeth, steady in Newark. February retail trade adversely affected by snow and cold weather. Industrial production close to high level of a month ago.

6. **Philadelphia Region**
Barometer increase over a year ago same as U. S., third highest rise from December; was 6% below U. S. barometer. Wholesale trade moderately above a year ago. Industrial employment and payrolls 12 and 20% above a year ago in Trenton; up 9 and 19% Philadelphia; 4 and 13% Wilmington. February steel production at 91.5% of capacity in Philadelphia. Coal production in Scranton-Wilkes-Barre area declined slightly.

7. **Pittsburgh Region**
Barometer increase over a year ago above U. S., monthly decline moderate; third lowest barometer, was 15% below U. S. Erie wholesale volume 30% above a year ago, Pittsburgh 20%. Factory employment above a year ago in Pittsburgh, up 25% in Erie. Pittsburgh index of trade 176.7; 6% above a month and a year ago. February steel production in Pittsburgh at 98% of capacity.

8. **Cleveland Region**
Barometer increase above a year ago close to U. S. gain, moderate monthly decline; was 2% below U. S. barometer. Wholesale trade even with a year ago in Akron, up 12% in Toledo, 5% Cleveland. Industrial employment 26% above a year ago in Lima; total employment dropped 2% in Akron in January, down 0.4% in Cleveland.

9. **Cincinnati and Columbus Region**
Barometer increase over a year ago above U. S. gain, fell fractionally from December; was 3% above U. S. barometer. Wholesale trade 26% above a year ago. Manufacturing employment in Ohio slightly above December, 12% above a year ago; 14% above a year ago in Columbus. Shortage of electric motors hampered production in some lines. Raw material deliveries improved.

10. **Indianapolis and Louisville Region**
Barometer gain over a year ago equal to U. S. gain, monthly rise among the sharpest; was 14% above U. S. barometer. Fort Wayne wholesale trade 35% above a year ago, Indianapolis 34%, Evansville 12%, Louisville 10%. Industrial employment in Indiana 1% above December, Kentucky down 1%. Industrial shipments delayed by lack of shipping space.

11. **Chicago Region**
Barometer increase above a year ago below U. S. gain; monthly rise slight; was 6% below U. S. barometer. Wholesale trade 34% above a year ago in Springfield, down 5% in Peoria, up moderately in Chicago. Industrial employment and payrolls in South Bend up 0.6 and 1% in month; Chicago industrial employment unchanged.

WORKERS LIKE THESE POSTERS



A series of thirteen posters, originally designed for exclusive use by Delco Products, Division of General Motors, has been found to be a splendid means of arousing employee good-will and co-operation.

The theme, "The Customer is Boss", is treated in cartoon style. Interest grows as the campaign progresses. Employees look forward to each succeeding poster—smile at the humorous situations—realize the importance of satisfying the customer. Each poster is shown for one week—a 13 week showing in all.

Posters are done in three colors, furnished in 24" x 36" and 15" x 22" sizes for standard bulletin boards.

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Advertising & Public Relations Counselors
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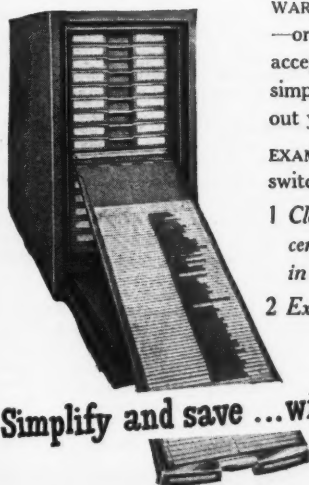
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Simplify and save ... with KARDEX

WARNING: Keep your eye on controllable costs—or profits may suffer plenty. Many a long-accepted expense can be sharply reduced by simplifying systems and procedures throughout your business.

EXAMPLE: Here's what one firm gained by switching to a Kardex-simplified sales control:

- 1 *Closer control over accounts . . . sharper concentration on profitable accounts, a reduction in selling expense on "deadwood".*
- 2 *Executive time saved by a picture comparison*

of facts that eliminates digging for information about quota, credit, customer follow-up.

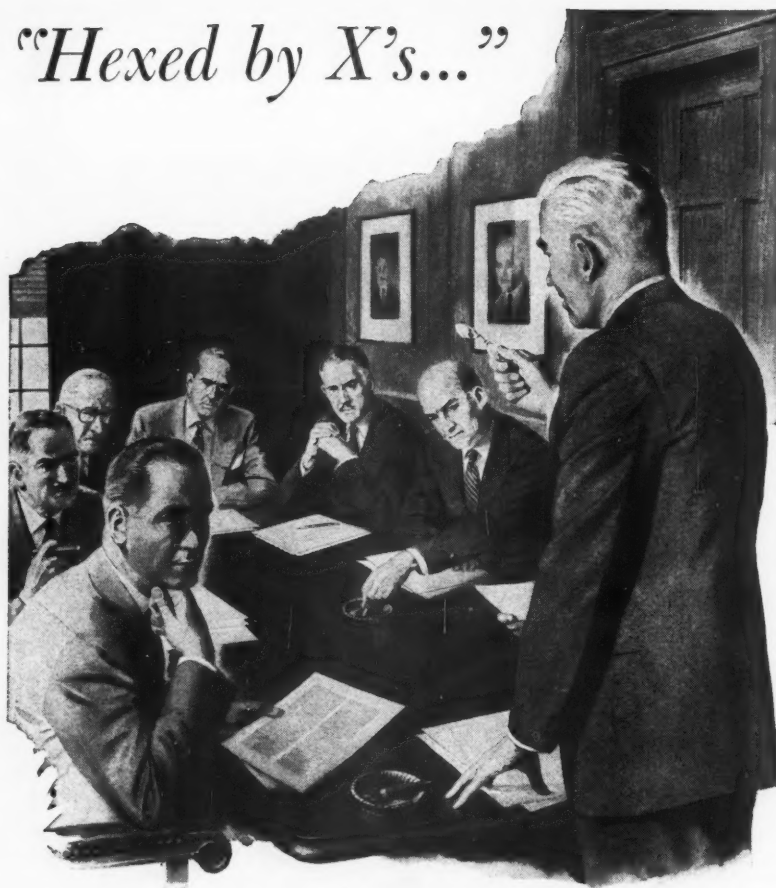
- 3 *Clerical time saved in preparing sales-to-quota figures. A new device computes percentages as an automatic by-product of Kardex signalling.*

Whether your costs are high in sales . . . purchasing . . . production . . . personnel . . . or inventory, RemingtonRand systems can slash your controllable costs. Call our local office for free 96-page systems analysis *Graph-A-Matic Management Control*. Or write Systems Division, 315 Fourth Ave., N Y 10.

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THE FIRST NAME IN BUSINESS SYSTEMS

"Hexed by X's..."



"That's the trouble, gentlemen," said the Chairman of the Board. "X's. Unknown facts. All afternoon we've been trying to make 2 plus X equal 4, without knowing the value of X. That kind of thinking would get you fired out of an eighth grade algebra class . . . and it isn't much help in running a ten million dollar business."

Fortunately for the directors, they knew where to find the man who knew where the hidden facts were buried. They asked the public accountant to translate the X's into values that made sense . . . and provided a rock bottom base on which to build plans for increased production and redistribution.

Technically an "outsider"—the accountant often has an inside track on information unknown to the very people most urgently in need of that information. Taking nothing for granted, he sees the connection between apparently unconnected "trivia" . . . appraises details in terms of over-all objectives . . . judges generalizations by the data on which they are founded. To do his job well, the accountant needs fresh facts . . . and he must have access to fact-finding tools.

McBEE is not an accounting firm . . . but our products and methods, evolved in 40 years, can help accountants secure needed facts faster, in more usable form.



THE McBEE COMPANY

SOLE MANUFACTURERS OF KEYSORT

295 Madison Avenue, New York 17, N. Y. . . Offices in principal cities

12. Detroit Region

Barometer gain over a year ago fourth highest of all regions; moderate monthly increase 3% below U. S. barometer. Grand Rapids wholesale volume 15% above a year ago, 17% in Saginaw. Michigan manufacturing employment steady with December, 32% above a year ago. Automobile production reached highest level since 1941. Time lost through strikes reached post-war low.

13. Milwaukee Region

Barometer gain above a year ago among the smallest, almost unchanged from December; was 4% above U. S. barometer. Milwaukee wholesale volume 25% above a year ago. Milwaukee industrial employment slightly above December; total employment down. Production up in machine, metal industries; steel shortages restricted further expansion.

14. Minneapolis and St. Paul Region

Barometer increase above a year ago highest of all regions, monthly gain among the highest; was 5% above U. S. barometer. Duluth wholesale trade 28% above a year ago, up 20% in St. Paul, 18% in Billings, 14% in Butte, 7% in Minneapolis. Manufacturing employment in Minnesota less than 1% below December. Minneapolis flour mill operations 2% above a year ago in February.

15. Iowa and Nebraska Region

Barometer increase above a year ago exceeded by one other region, sharpest monthly gain of all regions; was 8% above U. S. Wholesale trade 15% above a year ago in Sioux City, Des Moines; up 10% in Omaha, Lincoln; up 18% in Cedar Rapids. Total employment in Iowa up 2% from December, 8% above a year ago; payrolls up 4%, 29% above a year ago.

16. St. Louis Region

Barometer increase over a year ago above U. S. gain, monthly increase slight; was 1% below U. S. barometer. St. Louis wholesale trade 5% above a year ago. Manufacturing employment almost unchanged from the high December level; construction activity down moderately. Industrial gas shortages limited production of steel, varnish, and paint.

17. Kansas City Region

Barometer gain over a year ago close to U. S. gain, second sharpest monthly increase of all regions; was 8% above U. S. barometer. Wholesale trade 30% above a year ago in Tulsa, 3% in Topeka; down 5% in Kansas City, Oklahoma City. Oklahoma manufacturing employment fractionally below December, 3% below a year ago; Tulsa employment 4% above a year ago. Oklahoma City livestock prices rise.

18. Maryland and Virginia Region

Barometer increase above a year ago next to lowest of all regions, unchanged from December; was 2% below U. S. barometer. Baltimore wholesale trade 16% above a year ago, Lynchburg up 25%, Norfolk 5%, Richmond down 5%. Employment close to December level. Richmond cigarette production 4% above a year ago. Some raw materials and equipment more easily available.

19. North and South Carolina Region

Barometer increase above a year ago more than U. S. gain, monthly rise among the highest; was 14% above U. S. barometer. Wholesale trade even with a year ago in Charleston, Raleigh; up 4% in Winston-Salem, Greensboro; up 12% in Charlotte. Total employment unchanged from December; industrial employment up slightly. Some truck crops damaged by cold.

20. Atlanta and Birmingham Region

Barometer gain over a year ago among the lowest, monthly increase among highest; was 29% above U. S., highest of all regions. Atlanta wholesale trade 19% above a year ago, Birmingham up 15%, Knoxville 12%, Chattanooga 8%; Nashville, Mobile down 15 and 10%. Industrial employment down slightly in Atlanta, minor increases in Birmingham.

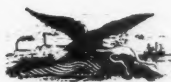
(Continued on page 56)

1853

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1947

...through its Agents and Brokers, is America's leading Insurance Protector of American Homes and the Homes of American Industry.



STATEMENT OF CONDITION

December 31, 1946

ADMITTED ASSETS

Cash in Office, Banks and Trust Companies	\$ 31,742,083.29
United States Government Bonds	43,379,480.50
All Other Bonds and Stocks	84,651,631.82
First Mortgage Loans	176,651.51
Real Estate	3,497,218.16
Agents' Balances Less than 90 days due	10,291,747.65
Reinsurance Recoverable on Paid Losses	1,856,152.43
Other Admitted Assets	1,819,592.74
Total Admitted Assets	\$177,414,558.10

LIABILITIES

Reserve for Unearned Premiums	\$ 78,273,559.00
Reserve for Losses	21,691,968.40
Reserve for Taxes	3,944,218.20
Liabilities under Contracts with War Shipping Administration	3,696,078.76
Reserve for Miscellaneous Accounts	948,521.81
Total Liabilities Except Capital	\$108,554,346.17
Capital	\$15,000,000.00
Surplus	53,860,211.93
Surplus as Regards Policyholders	\$68,860,211.93
Total	\$177,414,558.10

Directors

LEWIS L. CLARKE Banker	GUY CARY Lawyer
CHARLES G. MEYER The Cord Meyer Company	HAROLD V. SMITH President
WILLIAM L. DeBOST President, Union Dime Savings Bank	HARVEY D. GIBSON President, Manufacturers Trust Company
WILFRED KURTH Chairman of the Finance Committee	FREDERICK B. ADAMS Chairman of the Board, Atlantic Coast Line Railroad Co.
EDWIN A. BAYLES Dennis, Mass.	ROBERT W. DOWLING President, City Investing Co.
GORDON S. RENTSCHLER Chairman of the Board, National City Bank of New York	GEORGE GUND President, Cleveland Trust Co.
ROBERT GOELET Real Estate	HAROLD H. HELM First Vice President, Chemical Bank & Trust Co.
GEORGE McANENY President, Title Guarantee & Trust Co.	

NOTE: Bonds carried at \$4,413,915.98 amortised value and cash \$50,000.00 in the above statement are deposited as required by law. All securities have been valued in accordance with the requirements of the National Association of Insurance Commissioners. On the basis of actual December 31st market values total Admitted Assets would be increased to \$182,244,632.08 and the Surplus to Policyholders would be increased to \$73,690,285.91.



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Insurance Company
NEW YORK
FIRE • AUTOMOBILE • MARINE



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STANDARD BANK OF SOUTH AFRICA LTD. All banking facilities throughout South, Southwest and East Africa, also Rhodesia. Market research and trading contacts handled by Commercial Service Dept., Cape Town (B 40), through bank's New York agency, 67 Wall Street. Monthly Review available free on application.

AFRIMERIC DISTRIBUTORS PTY. LTD., 133 Longmarket St. Manufacturers' representative. Textiles, softs, fancy goods, hardware, paper board and timber. Branches throughout Union. Also Belgian Congo and Rhodesia.

BOCK & SON (B 2038). Branches Johannesburg, Durban, Port Elizabeth, Bulawayo. Textiles and underwear every description. Leather and findings for footwear industry, plastics, electrical.

HUTE, ROWLAND & CO. LTD. (B 693). Plastics, nylon stockings, textiles, glass, aluminum, electrical goods, tools, timber, oak staves, raw materials, foodstuffs.

ENT & GOODWIN CAPE PTY. LTD. (B 1446). Customs clearing and shipping agents.

DE VILLIERS A. I. & CO. (B 2933). Branch office Johannesburg. Direct importers agricultural insecticides, fertilizers and packing material. Seed potatoes and apples. Established connections throughout the entire Union.

UNAY G. F. (B 892). Manufacturers' representative and distributor, sales organization covers Southern Africa. Engineering supplies, material and machinery; all requirements for building and allied trades; general hardware; industrial chemicals and adhesives; sundry supplies of motor trade and garage equipment; liskins, rubber goods, plastics; cream, oil, and industrial separators.

ANDERSON GREIG (B 3189). Domestic hardware, hand tools, furnishing fabrics, imitation jewelry, novelties, pens and pencils.

HUDSON (Import Division) PTY. LTD. (B 1318). Complete national coverage; ample finance; own warehouses; stockist distributors, not commission agents or jobbers; correspondence invited.

INDUSTRIAL SUPPLY CO. PTY. LTD. (B 279). Chemicals and ingredients for food and drink.

INTERCOM AGENCIES PTY. LTD. (B 1587). Manufacturers' representatives, organized to attend to international commerce as import and export agents.

AY'S AGENCIES, 55 Hout St. Manufacturers' representative cotton piece goods in descriptions, towels. Other soft goods.

KEENE & CO. PTY. LTD. Head office: Box 2305, Cape Town. Branches: Johannesburg, Durban and Port Elizabeth. Agent at Lourenço Marques. Interested in all commodities suitable for the wholesale and retail distributive trade. Specialized departmental representation.

L. M. LEERS & CO. PROP. LTD. (B 2982). General merchants and importers. **L. LEWIS & CO. AND BRANCHES FURNISHERS CAPE TOWN.** Soft furnishings; curtaining, carpets, linens, crockery, etc.

NATIONAL AGENCIES (SOUTH AFRICA) PTY. LTD., 88 Church St. Cape Town head office. Agent and wholesale distributors druggists sundries. Depot stocks carried all leading centers South Africa and Rhodesia. Cable: "Hyruib."

RESTON AGENCY CO. PTY. LTD. (B 2247). Throughout South Africa. Foodstuffs, electrical accessories, textiles.

F. RAE & SON (B 442). Manufacturers' representatives foodstuffs, builders, household and electrical hardware, tools, plastics, chemicals. **EO. RAYMOND & SON** (B 2404). Ladies' showroom goods; men's hosiery; ladies' underwear, corsetry, infants' wear, haberdashery.

L. A. SEELIGSOHN (B 2892). Manufacturers' representative household commodities, hardware, textiles, etc.

MIEDT & IPP (B 470). Textiles, foodstuffs, electrical. All types merchandise presented throughout Union and South West Africa.

WINGLER BROTHERS PTY. LTD. (B 3371). Also Johannesburg. Engineering. Hardware. Automotive products. Builders' material.

UNITED AGENCIES (B 1568). South Africa's leading agents children wear, desire representation of children's dress manufacturers, branches Johannesburg and Durban.

DURBAN, S. A.

I. BEIT & CO. (B 2190). Associated offices in Johannesburg, Cape Town, Port Elizabeth and Bloemfontein. Cosmetics, fancy goods, furnishings, textiles, hardware, leather goods, automotive spares and accessories, automotive equipment and electrical fittings.

IONTAGUE BLUNT & CO. (B 2503). Seek direct factory representation interior decorations, plastics, indoor transport and similar lines; wrappings, packages, packings, also interested timbers and offer for export copra, copra oils and other African products.

D. TAIT (B 2846). MANUFACTURERS' REPRESENTATIVE. BRANCH OFFICE: CAPE TOWN. ASSOCIATED OFFICES: JOHANNESBURG, PORT ELIZABETH, EAST LONDON. DOMESTIC AND BUILDERS' HARDWARE. AMPWARE. DOMESTIC ELECTRIC APPLIANCES. PROPRIETARY FOODSTUFFS, CANNED SEAFOODS, AND MEATS, ETC.

ARGESSE & CO. PTY. LTD. (B 2607). Export all grades of minerals, chrome ore, manganese ore, graphite, mica, etc.; wine and spirits. Import timber, heavy chemicals, fertilizers, etc.

HAROLD J. DRINN PTY. LTD. (B 569). Mechanical and electrical supplies. Domestic and commercial electrical appliances. Power plants, switchgear, electric motors, cables, conduit and accessories.

E. WAYMAN McKEOWN (B 1436). Food products, hardware, soft goods and general merchandise.

REGENT PHARMACY PTY. LTD., 399 West St. Cosmetics, toilet requisites, chemists' sundries, fancy goods, proprietary medicines.

A. A. SAVAGE, 576 West St. Electrical domestic appliances. Motors and wiring equipment and accessories, fluorescent.

JOHANNESBURG, S. A.

ARGOSY IMPORTS PTY. LTD. (B 2452). Branches throughout South Africa. Specializing in women's, children's clothes and underwear, fancy goods, novelties and piece goods.

ASSOCIATED PROPRIETARY AGENCIES, LTD. (B 4247). Indent and distributing agents for toilet preparations.

ATKINSON & BARKER (B 3152). Manufacturers' representatives covering Southern Africa and Rhodesia. Interested only in handling quality goods direct from factory on commission basis. Specializing machine tools, hardware, textiles of all descriptions and sports equipment.

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BELL AGENCIES (B 3298). Factory representatives seeking direct British, Canadian and American factory representation engineering equipment, tools, hardware, woodworking machinery, electrical appliances. Agents in all leading centers.

HERBERT E. BOWEN—FRIENDLY ADVERTISING PTY. LTD. (B 3102). Exclusive sales South and Central Africa. Advertising specialties.

C.F.S. TRADING PTY. LTD. (B 5216). Glassware—domestic and packaging, hardware and kitchenware, packaging, essences, fancy goods, buttons, toys, kitchen articles, food products.

C. F. SHAW LTD. (B 4372). Factory reps., import, export agents, leading British, American, Canadian manufacturers. Branches or reps. in every British or French territory in Africa, India, Palestine, Middle East.

CHARTER ENGINEERING CORPORATION PTY. LTD., 514 Southern Life Building. Diesel and diesel electric power plants and equipment. Diamond drilling equipment. Mine and mill ore recovery equipment, connections with mining houses throughout Southern Africa.

BARRY COLNE & CO. LTD. (B 4130). Machinery and engineering supplies. Foundry equipment and supplies. Wood working machinery and accessories. Mill supplies.

COMMERCIAL & MINING UTILITY PTY. LTD. (B 2452). Building materials and mining materials. Completely covering Southern Africa.

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CONTINUED IN FIRST COLUMN ON NEXT PAGE—>

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21. Florida Region

Barometer increase over a year ago below U. S. gain, monthly drop sharpest of all regions; was second highest barometer, 25% above U. S. Wholesale trade 20% above year ago in Jacksonville, Tampa; down 15% Miami. Employment and payrolls steady with a year ago. Tourist trade in Miami near peak levels. Lowest temperatures since 1940 damaged from 10 to 15% of citrus crop.

22. Memphis Region

Barometer gain over a year ago close to U. S. increase, monthly increase above U. S. rise; was 18% above U. S. barometer. Wholesale volume 18% above a year ago in Little Rock, down 5% in Memphis. Arkansas non-agricultural employment down 4% from December, payrolls up 1%. Cotton harvest completed in Memphis area; farm activity favored by weather.

23. New Orleans Region

Barometer rise over a year ago below U. S. increase, monthly drop moderate; was 11% above U. S. barometer. New Orleans and Jackson wholesale trade 5% above a year ago. Louisiana manufacturing employment down 1% from December, 3% above a year ago. Strawberry crop retarded by cold, maturing favorably; no damage reported. Industrial production high.

24. Texas Region

Barometer increase over a year ago above U. S. gain, monthly decline slight; was 22% above U. S. barometer. Houston wholesale trade 26% above a year ago, Dallas and El Paso up 5%. Total employment about 1% below December post-war peak; industrial employment almost unchanged. Pasture good; preparations for Spring planting well advanced.

25. Denver Region

Barometer increase over a year ago third sharpest of all regions, monthly rise exceeded U. S. increase; was 9% above U. S. barometer. Albuquerque wholesale trade 10% above a year ago, down 10% in Denver. New Mexico manufacturing employment 1% above a month ago and 22% above a year ago, Colorado down 1 and up 17%. Wyoming down 12 and up 13%. Mining employment increased.

26. Salt Lake City Region

Barometer gain over a year ago among the highest, monthly increase equal to U. S. rise; fifth highest barometer of all regions, was 21% above U. S. barometer. Salt Lake City wholesale volume 23% above a year ago. Idaho industrial employment 5% below December, 13% above a year ago; mining employment at post-war high. February retail trade adversely affected by cold.

27. Portland and Seattle Region

Barometer gain over a year ago exceeded U. S. increase, monthly rise moderate; was 23% above U. S. barometer. Wholesale trade slightly above a year ago in Seattle, up 15% in Portland. Manufacturing employment in Washington fell 1% in January, 6% below a year ago. Industrial production generally above a year ago. Output in some lines limited by shortages of electric motors.

28. San Francisco Region

Barometer increase over a year ago below U. S. increase, monthly rise equal to U. S. gain; was 6% above U. S. barometer. San Francisco wholesale trade 35% above a year ago, Sacramento 20%, unchanged in Fresno. California factory employment down seasonally 3%, 14% above a year ago. Nevada manufacturing employment rose 3% in month, 25% above a year ago.

29. Los Angeles Region

Barometer gain over a year ago slightly above U. S. increase, monthly rise equal to U. S. increase; was 12% above U. S. barometer. Wholesale trade 14% above a year ago in Los Angeles. Industrial employment in Los Angeles 2% below December, 4% above a year ago. Arizona lettuce shipments, cotton ginning well above a year ago. February frost damage to citrus crop lowered quality; yield large. Moisture needed on ranges.

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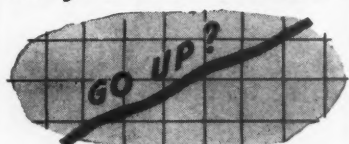
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LIFE IN OCCUPIED GERMANY

(Continued from page 25)

defining Nazi activities unjustly condemn many people who are really not Nazis, while permitting others, who were and will remain active supporters of the Nazi philosophy, to escape. They are not quite clear as to how else the job could be handled, or how separate rules could be established for millions of different individual cases, but they point to some specific person who has been unjustly condemned or improperly acquitted. Their thinking along other lines also tends to emphasize the individual result rather than the underlying principle, and to concentrate on the countless irritations which are inevitable in the military occupation they brought upon themselves.

Almost universally, in the American Zone, they have lost no opportunity to complain about what the Russians did to them or to someone they know. In Berlin, every German housefrau will point gleefully to each scratch on the furniture as an example of Russian atrocities. (In our own billet the housefrau carefully explained how the Russians had broken the grandfather's clock, when all it really needed was to be wound up and started.) Universally, too, they will tell you that they knew nothing at all of the crimes committed by their side before or during the war. Most of them had heard vaguely of concentration camps, but they seem to have been under the impression that they were some sort of rest centers.

Stories brought back by some of the more observant soldiers from the Russian front were usually hushed up within the immediate confines of the soldier's family. Almost all listened or claim to have listened to the British radio broadcasts during the war, but apparently they learned very little or nothing from them.

Individually, most of the Germans one meets are likeable, though I have never yet felt that I fully understand the thinking of anyone of them. Consider, for instance, the paradox of their social behavior. They always bow when they meet you and never say "hello" or "goodbye" without shaking hands even though the parting is only

for a half hour. Yet, a German crowd waiting to get on a train pushes infinitely harder and more ruthlessly than a New York subway crowd during rush hours; the principal purpose of the rucksack seems to be to leave the elbows free for jamming through. And that, as I understand it, was accepted behavior before the war as well as today.

If this description is puzzling and contradictory, so are my own thoughts on the subject. After seven months I feel I have no more of an understanding of German psychology than I had after I had been here a week. They are all deeply sorry for themselves, their individual consciences are clear, and I suspect they would do the whole thing over again if they were given half a chance. Nevertheless, as I said before, I like the individual Germans whom I have met, though they often make me very impatient by their inability to understand what happened and why. The children Joan and Dick have met are in many respects delightful, though old beyond their years. One of Dick's friends still carries proudly his "Hitler Youth" card.

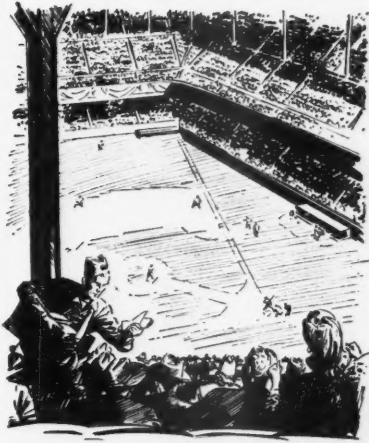
So much for that aspect, and a little more about the life here. Physically, as I have said already, we are well taken care of though by no means as lavishly as sensational reports have had it. The worst headache is transportation. It was always hard to get around and since Headquarters, in a fit of economy, has limited most official vehicles to a ration of two gallons per day, the situation is almost impossible. If you have your own car, of course, you can get around reasonably well and take advantage of the many opportunities for enjoyment and recreation one has everywhere. On rare occasions one can get down to the Bavarian mountains where life was untouched by war and which remain as delightful as ever. At home in Berlin most of us have managed to acquire fairly comfortable, though certainly not lavish billets. For example, my house here, acquired by virtue of top civilian rank, is certainly no larger, and considerably less attractive than the one we left behind us.

German architecture is generally fan-

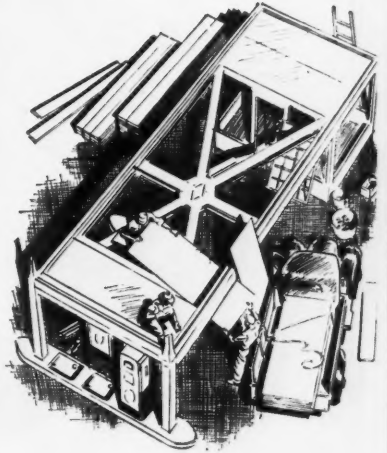
Net Profit \$253²⁶



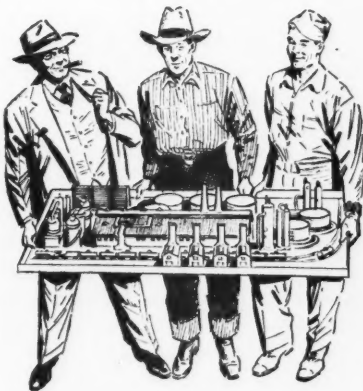
1. In 1946 the owners of Union Oil Company made a total net profit of \$8,867,023. Most of us will admit that almost 9 million dollars is a lot of money. But what many of us fail to consider is that those profit dollars were divided among a lot of people.



2. For Union Oil Company is owned not by 1 man or 2 but by 35,012 individual Americans—enough to fill a good-sized ball park. Divided among that many owners, the net profits actually averaged just \$253.26 per common shareholder.



3. Even this sum wasn't all paid out in dividends. \$4,200,753 was left in the business. So dividends paid out—money that actually went to the owners—averaged just \$133.28 per shareholder, or \$11.11 per month. Wages paid out, plus the cost of retirement and other benefit plans, averaged \$3,522.70 per employee, or \$293.56 per month.



4. In other words, while Union Oil Company looks pretty big from the standpoint of all its oil wells, refineries, service stations, etc., the company is actually owned—and the profits shared—by ordinary Americans like you and your neighbor next door. 70% of these owners live in the West.



5. There are 56 in Spokane, Washington; 10 in Grants Pass, Oregon; 177 in Bakersfield, California, etc. 2,150 are Union Oil employees. The average shareholder owns 133 shares—about \$2,900 worth on today's market. Some own less than this, some more; but the largest owns only about 1% of the total shares outstanding.



6. So it is not the investments of a few millionaires, but the combined savings of thousands of average citizens, that make Union Oil—and most American corporations—possible, and without some such method of providing the necessary tools, American mass production which is based on free competition could never have been accomplished.

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tastically bad, particularly in terms of the amount of space wasted. Every house has huge halls that serve no purpose and reduce living space to a minimum. Two servants are also furnished with each billet, but in terms of efficiency they are about the equivalent of half of one good American maid. Living is, of course much cheaper than at home, in good part because there is very little to spend your money on. The one group that finds things most difficult is the single woman in the clerical and stenographic grades, whose billeting is much more meager and who, as my secretary says, are forced to resort to all sorts of subterfuges to make their quarters habitable.

Black Market

Now, a word as to the "black market" about which so many sensational accounts have been written. Its heyday, when anyone could take a dollar carton of cigarettes, sell it for 1,000 marks or more, convert the marks into \$100 and ship the proceeds home has long since passed. The introduction of currency control last Spring, and of dollar scrip for all transactions in American establishments starting in September, effectively put an end to that sort of pernicious practice.

As far as the Americans are concerned today, black market trading for profit is confined to a very few. It is true that many Americans still obtain marks by selling cigarettes at the rate of 1,000 or more per carton rather than at the official exchange rate of 10 marks per dollar, even though such sale constitutes specific violation of a theater directive. However, the marks thus obtained are, for the most part, used to make billets livable, or to buy minor luxuries.

The situation arises in part by the curious state of the German market, which makes it impossible to buy such items at a fair valuation, they either cost ten times too much or one-tenth what they are worth. For example, a bicycle—often an indispensable item in view of the pitifully inadequate local transportation facilities, may be priced at some 2,500 marks. That means either \$250 at the official exchange rate, or \$2.50 in cigarette marks; the fair value might be \$20. There is no midpoint.

It should be stressed, too, that the

German inflation does not affect substantially the prices of the rationed items comprising the necessities of life, such as food and basic clothing. Here price control is still amazingly effective.

All in line, the amount of black market activity carried on by the average American is not great, and is directed mostly toward providing himself with the comforts he was accustomed to a home, and which he can obtain through no other method.

A Good Job Is Being Done

Finally, how about the job here? To answer that at all satisfactorily would, in effect, involve an appraisal of the occupation; in view of the length of what has gone before, that had better be left for my next letter. Suffice it here to say that, on the whole, the job is being done honestly and sincerely and with full appreciation of the magnitude of the issues involved; that the top command is good; that there are the usual weak spots in some of the intermediate places, that working for the Army develops some of the snafus and frustration one would anticipate but that many things move far better than might be expected; that physical progress toward recovery in our Zone has been real and substantial; that political and psychological progress toward real denazification and democratization has made some apparent strides but that the depth of the penetration remains a great question mark. One should say, too, that if our relations with our Allies have not been all that might be desired that was not due to any lack of effort or good-will on the part of our top command here and that, in my opinion at least, substantial improvement should be in the making. Certainly our relations with the Russians have not been as cordial as, say, with the British, but many of the State-side stories of friction are sheer wild exaggerations and the number of direct incidents between the troops have been extremely small. Personally, I am optimistic as to the future, though not yet sanguine.

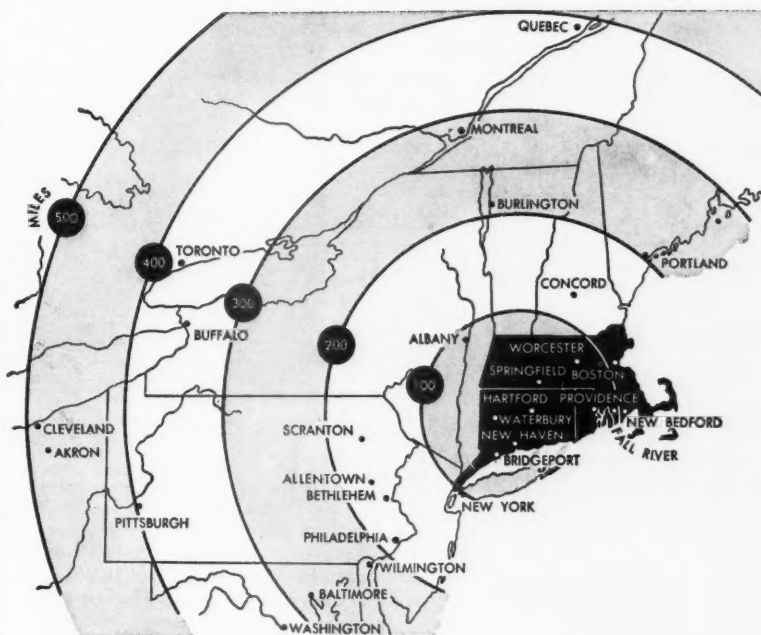
So much for now. What I started as a letter has almost turned into a magazine article. With best regards.

Cordially,

Saul

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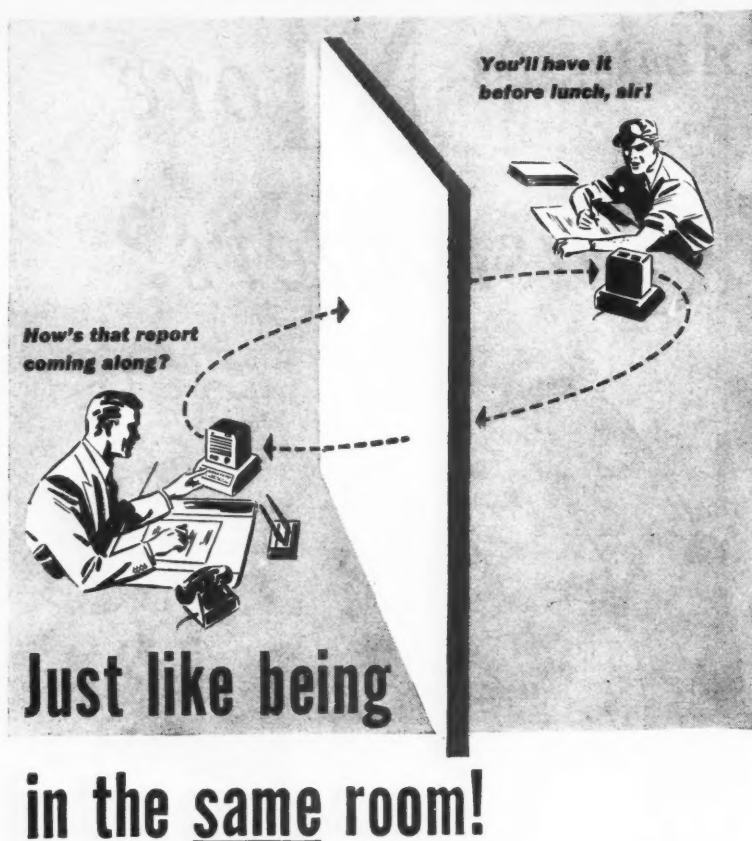
38.1% of the nation's population lives within 500 miles from the center of Southern New England. This area earns 54.2% of America's industrial wages and salaries; pays 50% of individual U. S. income taxes; holds 72.4% of the country's savings deposits; bought 41.2% of all goods sold across retail counters in 1945.

Being close to this tremendous purchasing power is just one of many advantages enjoyed by industry in Southern New England.

For more facts to help you plan for future profits, write for a free copy of "SOUTHERN NEW ENGLAND FOR TOMORROW'S INDUSTRY." Address: P. E. Benjamin, Mgr., Industrial Development, New Haven Railroad, Room 200E, 80 Federal St., Boston 10, Mass.

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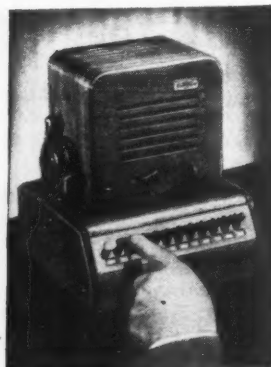
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PRODUCTIVITY

(Continued from page 23)

other, is a convincing demonstration of the rather obvious fact that large groups of workers cannot long continue to gain from their efforts more than those efforts produce, nor will they long continue to get less.

In conjunction with the rather modest average of profits for all manufacturing corporations over the period covered by the chart (in terms of either return on investment or percentage of sales), the chart is a denial of any widespread exploitation of workers by the owners and managers of American manufacturing corporations. In recent years, if anything, the chart shows the reverse to be true—real hourly earnings have been higher than production per man-hour would justify, so that owners and managers were being "exploited" by labor to an extent at least equal to any opposite exploitation revealed by the chart over the past 30 years.

Over the past 30 years production per man-hour has shown a great and almost continuous rise, and so have the real hourly earnings of factory wage earners, sometimes through higher wage rates, at other times—and just as effectively—through lower prices. There appears to be no compelling reason why this steady progress cannot continue over the next several decades, as it has in the past. Indeed, the expenditure of time and money on technical research and development has mushroomed in recent years, and is still growing rapidly. While the plodding technique of mass research may seem a poor substitute for the brilliant perception which has marked some of the major scientific and industrial discoveries of the past, the great modern laboratories have poured out an impressive quantity of discoveries—and there

THE BAROMETERS

The DUN'S REVIEW Regional Trade Barometers, including back figures, adjusted and unadjusted, together with additional information, are available in pamphlet form. The barometers, appearing in DUN'S REVIEW since 1936, measure consumer buying for 29 regions of the U. S. and for the country as a whole. They help sales executives to analyze sales, adjust quotas, and to check sales volume with total consumer expenditures.

COLUMBIA GAS SYSTEM in 1946

From the Annual Report of Columbia Gas & Electric Corporation

Columbia Gas System is now engaged principally in producing, purchasing, transporting and selling gas. During 1946, Columbia Gas & Electric Corporation complied with the Securities and Exchange Commission's order for geographic integration. This included the sale of its interest in The Dayton Power and Light Company and The Cincinnati Gas & Electric Company.

Columbia Gas System now consists of the parent Corporation, Columbia Engineering Corporation, the subsidiary service company, and nineteen subsidiary operating companies constituting a completely integrated system.

The System supplies directly or indirectly, about 1,500,000 residential, commercial and industrial customers in Kentucky, Maryland, New York, Ohio, Pennsylvania, Virginia, West Virginia and the District of Columbia.

During the year the Corporation redeemed its Bank loans, Debenture Bonds and Preferred and Preference Stocks and two new issues of Debentures were sold at lower interest rates. This refinancing leaves the Corporation with only one class of stock, subject to \$97,500,000 of debt in short term serial Debentures and long term sinking fund debentures—a sound and conservative capital structure.

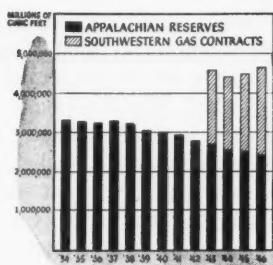
COLUMBIA GAS & ELECTRIC CORPORATION AND SUBSIDIARY COMPANIES PRO FORMA CONSOLIDATED INCOME STATEMENTS

	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Subsidiary Companies:										
Gross Revenues	95,070,481	86,917,688	83,329,353	87,880,149	81,217,593	75,025,186	73,223,570	65,698,462	61,101,352	68,834,327
Operating Expenses and Income Deductions	75,907,977	70,419,714	67,065,962	71,854,730	66,163,901	61,127,278	58,822,023	52,025,856	49,807,975	53,078,969
Balance Applicable to Corporation	19,162,504	16,497,974	16,263,391	16,025,419	15,053,692	13,897,908	14,401,547	13,672,606	11,293,377	15,755,358
Columbia Gas & Electric Corporation:										
Net Expenses	1,578,126	1,633,197	1,949,813	1,920,152	1,772,249	1,417,328	1,353,888	1,566,753	1,403,123	1,490,842
Balance Before Fixed Charges	17,584,378	14,864,777	14,313,578	14,105,267	13,281,443	12,480,580	13,047,659	12,105,853	9,890,254	14,264,516
Fixed Charges:										
Interest on Debentures	2,796,875	2,796,875	2,796,875	2,796,875	2,796,875	2,796,875	2,796,875	2,796,875	2,796,875	2,796,875
Other Deductions	108,757	112,728	108,306	127,704	139,038	194,204	192,420	203,941	260,045	286,641
Total Fixed Charges	2,905,632	2,909,603	2,905,181	2,924,579	2,935,913	2,991,079	2,989,295	3,000,816	3,056,920	3,083,516
Consolidated Net Income*	14,678,746	11,955,174	11,408,397	11,180,688	10,345,530	9,489,501	10,058,364	9,105,037	6,833,334	11,181,000
Consolidated Net Income per Share of Common Stock Outstanding Before Provision for Retirement of Debentures*	1.20	.98	.93	.91	.85	.78	.82	.74	.56	.91
After Provision for Retirement of Debentures*	1.04	.81	.77	.75	.68	.61	.66	.58	.40	.75

The above statements are on a "pro forma" basis—that is, they have been restated as though the System during the periods covered had been the same as it is now. These "pro forma" statements and figures exclude, for the entire periods covered, the operations of companies which have been divested and give effect to the refinancing which has been completed. Only on this "pro forma" basis can information concerning past periods be given which is in any sense applicable to the present System; however it must be remembered that the present System did not exist as such in these past periods and the pro forma figures are of necessity restated figures, adjusted to project a present situation into the past.

*The Indenture securing the Corporation's new Debentures requires the Corporation to make regular annual payments for the retirement of Debentures, ranging from \$2,000,000 in the years 1947 through 1949 up to \$3,700,000 in 1970. Although payments to retire debt are not, strictly speaking, charges against income, they must be taken into account in any realistic view of the balance of earnings which the Corporation will have available for Common Stock dividends. Accordingly, in the pro forma income statements for past periods, the net income per share of Common Stock has been shown both before and after deducting from net income an amount of \$2,000,000 for debt retirement.

COLUMBIA'S GAS RESERVES



There is ample gas in Southwest fields which, with The System's Appalachian supply, is sufficient to service Columbia's customers for many years to come. All that is needed are new transmission facilities, construction of which was virtually halted by the shortage of steel and other materials. Columbia's gas reserves are currently estimated at 4,633,000,000 Mcf.

of which was virtually halted by the shortage of steel and other materials. Columbia's gas reserves are currently estimated at 4,633,000,000 Mcf.

The information set forth here is not given in connection with any sale, offer or solicitation of an offer to buy any securities.

COLUMBIA GAS SYSTEM

The Manufacturers Light and Heat Co. The Ohio Fuel Gas Co.
United Fuel Gas Company

Amerc Gas Utilities Company Home Gas Company
Binghamton Gas Works Natural Gas Co. of W. Virginia
Central Kentucky Natural Gas Co. Cumberland & Allegheny Gas Co.
Gettysburg Gas Corporation The Keystone Gas Co., Inc.
Virginia Gas Distribution Corporation



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is no reason to assume that men capable of brilliant perception have ceased to exist. The harnessing of research discoveries to industrial progress, however, will require an attitude of willing acceptance of change on the part of management, labor, and Government, an enormous outpouring of funds for investment, and a tax structure and policy which recognize both the realities of risk and obsolescence and the need for new investment by those who can bear the risk, as well as reinvestment by producers who show their ability to succeed.

Path to Higher Real Income

The chart showing the relation of productivity to horsepower in manufacturing and that showing the relation of real hourly wages to output per man-hour, taken in conjunction, indicate that expanded investment in mechanical aids to production is the surest path to higher real income for labor. On this basis one might expect to find organized labor exerting constant pressure to foster increased investment in machinery; actually organized labor, primarily because of the immediate displacement of workers usually involved in mechanization of production, has generally fought the installation of labor-saving devices. A classic example has been the experience of British textile workers, who fought power equipment for years by increased effort and the development of consummate skill, as well as by bitter opposition, until continued technical progress in the United States and other textile-producing countries finally overwhelmed both the British textile industry and the British textile workers; in recent years both have been fighting a bitter uphill struggle to regain their lost position.

Further, organized labor has consistently fought for so-called "progressive" tax policies which bite so deeply into funds which would normally be available for investment, and so drastically weaken the incentive to take risks with the funds that are left, as seriously to threaten the continuation of the growth in manufacturing investment on which rising real incomes in the future will depend. In only one sense can the general attitude of organized labor be termed constructive insofar as the continued growth in productivity through

The Todd Company, Inc., Rochester 3, N.Y.

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mechanization is concerned: its continuous pressure for higher wage rates has maintained a steady pressure on management to economize in the use of labor by installation of labor-saving devices, and has repeatedly warranted installations which, at lower wage levels, would not have been made.

Much of the heat engendered by discussion of productivity is due to the connotation that productivity stems from the individual efficiency of workers, or from the effort which individual workers put forth. Skill and effort on the part of individual workmen are certainly not to be ignored or discouraged; the experience of recent years has afforded too many graphic illustrations of the importance of workers' skill and effort in the smooth functioning of industrial operations. But over the first 40 years of this century, output per man-hour in all American manufacturing more than tripled, and it is impossible to believe that the average skill or effort exerted by several million workers increased in any such period.

Productivity Interpretation

There is more basis for believing that productivity should be interpreted as the efficiency with which labor is used. This interpretation brings into the picture not only sufficient training of workers to develop the requisite skills, and leadership of sufficient caliber to evoke satisfactory effort, but the organization of human beings into teams with each playing his specific part, the development of improved processes, the design and provision of improved machinery and equipment, and the co-ordination of all the sections of a varied enterprise. In short, as thus interpreted, productivity becomes a function not of labor, but of management.

True, in the short run, such factors as deliberate slow-downs, strikes, high labor turnover, union agitation, and "featherbedding" practices may shift most of the appearance of responsibility, and some of the actual responsibility for the level of productivity from management to labor. It should be noted, however, that all of these effects are negative; there is little question that labor can reduce productivity by such tactics, but there is room for serious doubt whether, on the positive side, it can add much more to productivity



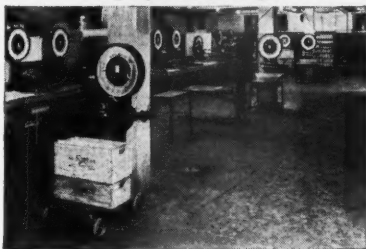
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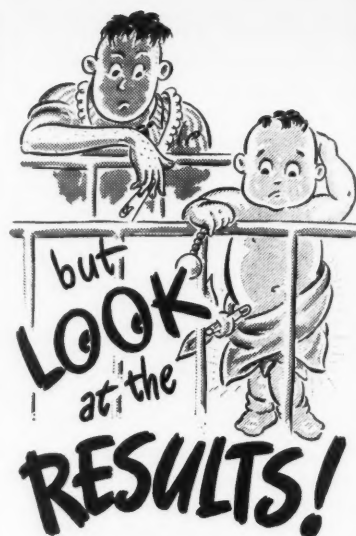
than such activities have first taken away. At any rate, the possibility of worker opposition to innovations aimed at increasing productivity is no new obstacle to management, but one that has always existed and must always be considered, either to be sidestepped or overwhelmed.

Gains Unevenly Distributed

One of the least-appreciated facts about productivity gains is that they almost invariably appear in small sectors of production—a single product line, or a single product within a line, or, most often, a single part of a product. Their impact is not felt evenly throughout the production of a plant, an industry, or an economy, but most unevenly in these small, localized sectors. Failure to appreciate this salient fact has given entirely unwarranted acceptance to the statistic that, over a period of years, production per man-hour has increased by 2 or 3 per cent a year, and has allowed unwarranted conclusions to be drawn from it.

Suppose that in a plant making both refrigerators and washing machines, a new technical development makes it possible to produce a washing machine with 10 per cent fewer man-hours. Does this mean that the workers producing refrigerators have become more efficient? Does it mean that other employees of the same company in distant and unrelated plants have become more efficient, or that workers in other companies have become more efficient? Certainly not. Yet there are many who argue that each year's accumulation of such scattered achievements, translated through the medium of mass statistics into an observable increase in average output per man-hour, should serve as the basis for general wage increases throughout the economy.

The chart relating wages to output per man-hour demonstrates that, over a long period of years, gains in average output per man-hour actually have been translated into higher real earnings for wage earners, sometimes through wage increases, sometimes through price reductions. Since this result has occurred anyway, arguments as to what policy should be pursued in distributing productivity gains may be considered academic. But if, as seems to have become



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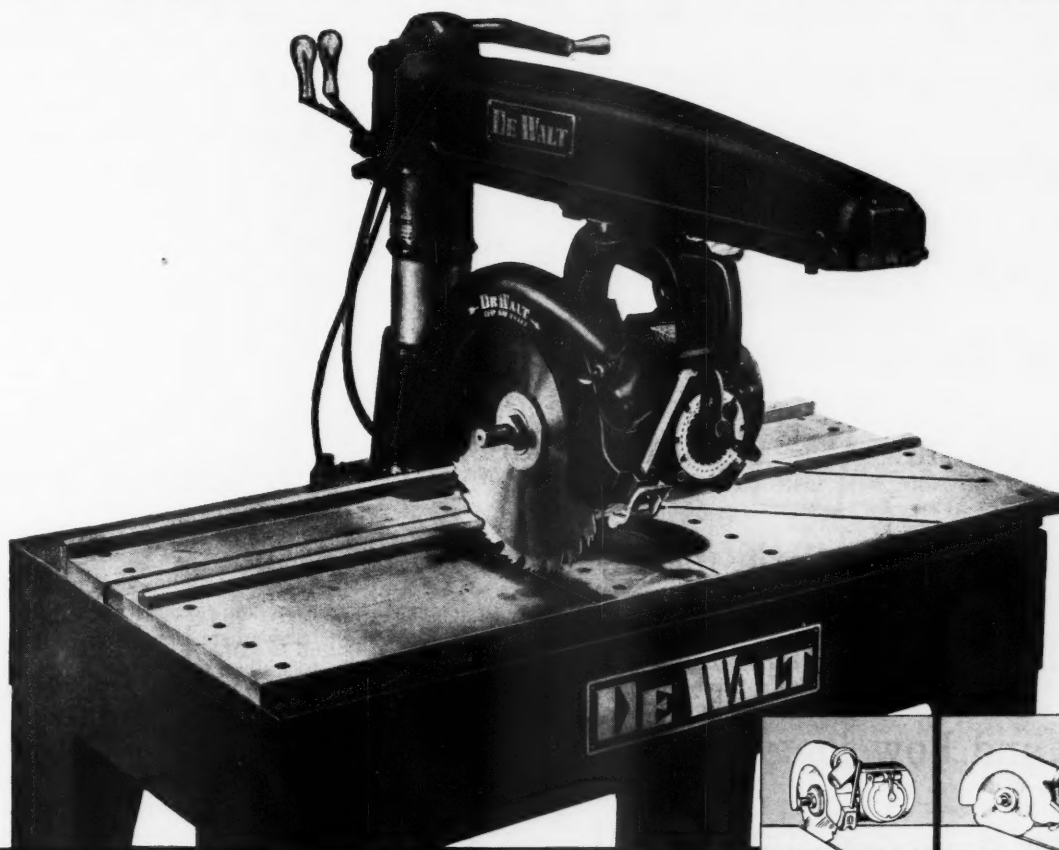
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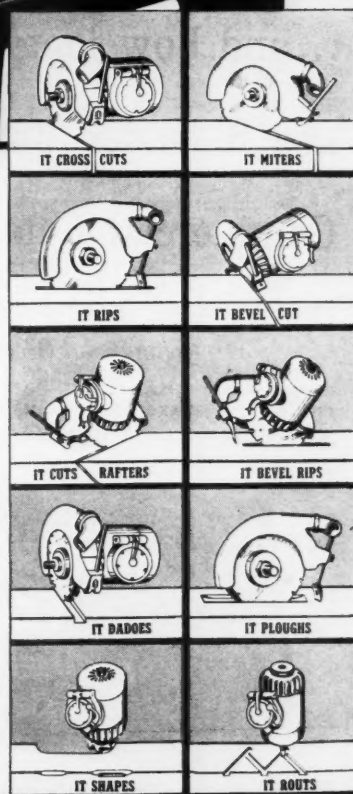
Before the fighting ended, we started to tell you, as an executive, about America's outstanding woodworking machine.

The war-time record of DeWalt proved beyond doubt that this machine is the No. 1 all-purpose saw for your postwar woodworking needs.

Many of the executives who read this magazine responded to our first advertising and secured the necessary technical information to pass along to their men. Many bought DeWalts.

Despite nation-wide shortages during the past year, we have been consistently stepping up production to meet new demands. Deliveries are even better.

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the fashion, we must have a national policy whether we need it or not, it is clearly inequitable to channel all the gains of increased investment and technological advance into the hands of the one-fourth of our workers who are employed in manufacturing.

If all the gains must be distributed through a single channel, a much better case can be made for price reductions than for wage increases, as Edwin G. Nourse argues so persuasively in his book, *Price Making in a Democracy*. As a practical matter, productivity gains are divided three ways, to profits, price reductions, and wage increases—and woe betide the manager who must meet competition on all three fronts with no productivity gains to divide!

DISTRIBUTION

(Continued from page 14)

mobiles, 21 million electric refrigerators, 28 million electric irons, 18 million electric washers, 18 million telephones, and 60 million radios!

Probably no great reduction could be made in the cost of distributing goods without reducing some of the merchandising services to which the public has become accustomed. Incidentally, virtually all of these services mean jobs for somebody.

We may question the high cost of distribution when we discuss the country's economic ills, but in our own method of living, most of us don't wish to return to the days when crackers and sugar were shoveled out of open barrels and milk was left in a pan on the back porch. We demand our foods in clean packages and our cigarettes protected by cellophane and foil, our purchases delivered in small quantities on credit and with the privilege of sending them back the next day if we change our minds or our wives don't like them. We want numerous and convenient gasoline stations, with clean toilets and plenty of quick, free service. We expect every cross-roads garage to carry spare parts for our low-priced cars.

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AUTO CARROCERIAS, LDA, (B 406). Importers of materials for construction of automobile and bus bodies.
AUTO-GERAL V. GARCIA, LDA, (B 499). Tel. Add.: Garçiviana. Agents and importers of automobile spare parts.
A. WUNDERLI (B 688). Import, export agent, Port Wine dealer. Sales agents required.
CANTINHOS & MARQUES, LDA, (B 159). Manufacturers, exporters corks, corkwood, corkwaste and virgincork.
CARLOS GOMES & CA., LDA, (B 658). Tel. Add.: Vante. Ship brokers, forwarding agents, stevedores. Chartering.
EMPRESA TECNICA & ADMINISTRACOES, LDA., R. Nova Trindade, 1. Import metals, chemicals, machinery, scientific equipment.
ESTABELECIMENTOS ALVES DINIZ & CA, (B 343). Tel. Add.: Aldiniz. Foodstuff importers and exporters.
EST. JERONIMO MARTINS & FILHO, LDA, R. Garrett, 23. Importers groceries, chemicals, stationery, perfumes, etc.
FERNANDES & PINTO, LDA, R. Maria Andrade. Import anilines, pigments, essential oils, raw materials for tanning, perfumery and textile.
FERNANDO CASTEL-BRANCO, Ave. João Crisostomo, 25. Import and export. Philatelic department.
FRANCISCO BENITO & CA., LDA. Export olive oil, fresh and dried fruit, olives, garlic, paprika, Guinea pepper, etc.
HENRY M. F. HATHERLY, LDA, Rua Comercio, 8. Tel. Add.: Ergo. Merchants, agents, import and export ergot rye, saffron, medicinal-aromatic herbs, brandies, wines.
INSTITUTO PASTEUR DE LISBOA (B 378). Mfrs., import, export pharmaceutical, chemicals, surgery material, etc.
J. LAVADO & CA., LDA, (B 590). Sales agents, export preserves, Colonials, cork; import raw materials, chemicals.
JOHN W. NOLTE, LDA, (B 92). Exporters of cork, sardines; importers, agents iron, steel, non-ferrous metals.
J. PACHECO CALÉ, LDA, Rua S. Julião, 80, 3°. Tel. Add.: Calé. General agents.
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MANUEL VENTURA FRADE (B 226). Packer, exporter, sardines, Algarve-tunny, mackerel, anchovies in pure olive oil.
MARIO SILVA, Rua das Flores, 81. Shipping agent, import and export.
MARMORES DE SOUSA BAPTISTA, LDA, Praça do Município, 30. Exporters of marbles.
RADIO INDUSTRIAS, LDA, Rua da Madalena, 85. Tel. Add.: Radustrias. Import radios, photographic commodities.
RODRIGUES & REIS, LDA, Rossio, 93, 2°. Commission agents and merchants. Desire foodstuff and other agencies.
SANO TECNICA, LDA, R. Nova Alameda, 61. Surgical instruments, laboratory apparatus, furniture, reagents, etc.
SOC. COMERCIAL LUSO-AMERICANA, LDA, Rua Prata, 145. Import-export stationery, office equipment, all novelties.
SOC. COM. POLLERI, LDA, Rua da Emenda, 26, 1°. Import all industrial requirements. Manufacturers' representatives.
SOCIEDADE LUSO-BRITANICA, LDA, Rua Corpo Santo, 10. Tel. Add.: Diasal. General agents.
SOCIEDADE LUSO-SUECA, LDA, (B 146). Tel. Add.: Luzul. Seeks factory representations. Knitting machines; industrial sewing; machines for tailors, and shirt makers.

SOCIEDADE DE VINHOS & MOSTOS, LDA, (B 563). Tel. Add.: Vimosto. Exporters of Portuguese wines and brandies.
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DIAS. ARAUJO & CA., LDA, (B 15). Sardines, anchovies and all kinds of canned fish. Packers and exporters.
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LAGE, FERREIRA & CA., LDA, Packers and exporters of anchovies and skinless and boneless preserved sardines.
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A. C. PIMENTA, LDA, Rua Sá Bandeira, 283. Cotton agents. Interested in agencies for artificial silk yarns and textiles in general. Also electric home appliances.
AUMAFECA, Rua Entreparedes, 16, sala 15. General agent for own account. Import and export.
BANCO BORGES & IRMAO (B 33). Tel. Add.: Borgimao. Branches in Lisbon and main towns. All banking services.
BENTO PEIXOTO & LOPES, LDA, Rua Mousinho Silveira, 81. Import iron, steel, tinplate, tools, ironmongers.
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ESPECIALIDADES ELECTRICAS, LDA, Rua Fernandes Tomaz, 710. Insulating; machines, domestic appliances.
J. GUIMARAES & FERREIRA, LDA, R. José Falcão, 171. Imp., tobacco, stationery, hardware, novelties, electrical.
J. ROCHA, LDA, R. Passos Manuel, 166. Importers of radios, refrigerators, electric ovens and medical electricity.
LEMOES & FILHOS, LDA, Praça Carlos Alberto. Import pharmaceutical specialties, perfumes, beauty preparations.
LIVRARIA SIMOES LOPES, Rua do Almada, Est. 1880. Books, editors, importers; export stationery, office supplies.
MANUEL FREDERICO, Rua S. Antonio, 57, 1°. Seeks agency Portugal, Portuguese Africa general merchandise.
REPRESENTACOES ANGLO-AMERICANAS, LDA, R. José Falcão, 133. Fluorescent, electrical home appliances.
REPRESENTACOES ANGLO-LUSITANAS, LDA, Praça da Batalha, 90. Tel. Add.: Ralim. Building, chemical products.
SOCIEDADE IMPERIO COLONIAL, LDA, Head Office: R. José Falcão, 171. Africa import and export.
TASSO DE SOUSA, MAGALHAES & CA., LDA, R. Firmeza, 476. Motor cars, accessories. Sales agents and importers.
UNIVERSAL, SOCIEDADE ACOES MAQUINAS & FERRAMENTAS, LDA, Rua Sá Bandeira, 534. Imp. machines, tools for industries.

VILA NOVA DE GAIA (Portugal)

MIGUEL DE SOUZA GUEDES & IRMAO, LDA, Est. 1851. Proprietors Alto Douro. Exp. Port Wine, brandy.
SPIR. SOC. PORT. I. & REPRESENTACOES, LDA, Importers iron, steel, wire, tubes, small tools, machinery.

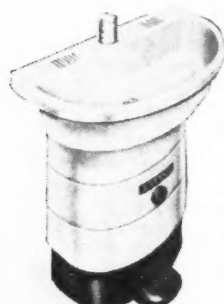
A PRACTICAL WASHFOUNTAIN FOR MODERN WASHROOMS



ONE FIXTURE TAKES THE PLACE OF TWO

Since modern washrooms combine maximum sanitation and convenience with economy of maintenance, Bradley's new DUO-Washfountain is the natural choice.

One DUO serves two persons simultaneously, each with an ever-clean spray of running water. One



The DUO is the latest, most modern improvement in washroom facilities.

DUO-Washfountain takes the place of two conventional wash basins and one sanitary sprayhead replaces four faucets. Foot-control operation keeps hands free from contagious wash-bowl and faucet contacts while the self-flushing bowl reduces maintenance expense.

For equal capacity, Bradleys require fewer piping connections, thus less installation work. Water consumption and heating costs are reduced—floor and wall space saved. Bradleys are distributed through plumbing wholesalers. **BRADLEY WASHFOUNTAIN CO., 2352 West Michigan Street, Milwaukee 1, Wis.**

New illustrated Bulletin 464-D sent promptly on request.

BRADLEY
Duo Washfountains

or take them off depending on how their sales and profits are affected.

Every intelligent business man knows that total distribution costs could be lowered by lopping off all frills and non-essentials, but it doesn't necessarily follow that this would benefit our national economy. In our new automobiles we might eliminate cigarette lighters, ash trays, ceiling lights, electric clocks, and chromium trim and sell the bare essentials of efficient transportation. People get the extra gadgets and costly service because they demand them. Distributors provide them to gain the economies and profits of volume.

Several years ago a book attacking the cost of distribution was published. Its authors criticized, among other things, the cost of wasteful and costly packages. But their book bore an expensive four-colored jacket. Why? To make it more attractive so enough copies would be sold to make possible the low price and still leave the authors a profit.

Competition

One reason many people readily accept the frequently repeated slogan, "Distribution costs too much," is that, on superficial consideration, the physical evidences of competition appear wasteful while the benefits are less apparent. People remember the four gasoline stations at one street intersection, and overlook the fact that the price of gasoline has declined to the point where it is as cheap as bottled water. They see millions spent in advertising brands of cigarettes and chewing gum and forget the ridiculously low prices at which these products are now obtainable.

Some critics view competitive advertising as wasteful, overlooking its influence in creating desire, increasing living standards, and bringing the economies of volume to the public.

Informative advertising, which gives reliable factual data concerning available goods and services, is itself of direct benefit to the reader or listener in his rôle as a consumer.

Advertising and sales promotion are the counterpart of the machine in production. The magic of advertising lies in the large audience it reaches. Advertising uses mechanized methods to de-

"Letter Perfect" Paper

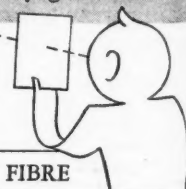


Every letter carries a message beyond what its words convey. The letterhead design and the paper upon which the sender's thoughts are carried both express by appearance the character of the sender. Perfection of one of these — letterhead paper—has been FOX RIVER's business for 64 years. Anniversary Bond of 100% cotton fibre is FOX RIVER's "letter-perfect" paper. Strength, crispness and crackle are its qualities that enhance your written words. Ask your printer why cotton fibre content paper is the finest. FOX RIVER's grades of 100, 75, 50 and 25% cotton fibre papers meet every business need. **FOX RIVER PAPER CORPORATION, 402-D South Appleton Street, Appleton, Wisconsin.**

Bond, Ledger and Onion Skin Papers

OUR WATERMARK
is your quality guarantee

Look through
the paper...
see all three!



- 1 COTTON FIBRE
- 2 25-50-75 or 100% COTTON FIBRE CONTENT
- 3 MADE "by FOX RIVER"



Marquis James tells of "ONE OF METROPOLITAN'S GREATEST YEARS—1946"

IN LINE with its long-established "Open Book" policy, Metropolitan recently asked Marquis James, noted historian and a Metropolitan policyholder, to write the Company's Annual Report to Policyholders for 1946.

Mr. James was unusually well equipped to do this because he had just finished, at the request of the Company, a three-year study of Metropolitan's operations from the time it was founded. The results of this study have been published by the Viking Press under the title of "The Metropolitan Life, A Study in Business Growth," on sale at any bookstore.

In Mr. James' report of the Company's operations for 1946, he tells a story of *continued progress* in service to policyholders.

He points out—

—that payments to policyholders and their beneficiaries last year exceeded \$630,000,000.

—that 2,400,000 people bought new Metropolitan policies in 1946.

—that the amount of new insurance purchased in 1946 topped anything in Metropolitan's 79 years in business.

—that the gain in insurance in force set a new high record.

—that the Company had one of the lowest death rates in its history.

—that, despite a trend toward increased costs caused primarily by a continued decline in interest rates earned, the Company has found it pos-

sible to continue dividends on Ordinary and Industrial policies during the coming year at the same rates as during 1946.

Mr. James' report is much more than a compilation of statistics. Among other things, he discusses the social value of Metropolitan's investments. For example, he characterizes Metropolitan's housing program as a—

—"*vivid demonstration of how private enterprise works for the public good.*"

Whether or not you are a Metropolitan policyholder, you will find the Annual Report to Policyholders well worth reading. To get your free copy, just fill in and mail the coupon below.

BUSINESS REPORT FOR 1946

(In accordance with the Annual Statement as of December 31, 1946, filed with the New York State Insurance Department.)

OBLIGATIONS TO POLICYHOLDERS, BENEFICIARIES, AND OTHERS

Policy Reserves Required by Law	\$6,891,359,670.02
This amount, together with future premiums and reserve interest, is required to assure payment of all future policy benefits.	
Reserved for Future Payment Under Supplementary Contracts	332,747,697.65
Policy proceeds from death claims, matured endowments, and other payments which beneficiaries and policyholders have left with the Company to be paid out to them in future years.	
Policyholders' Dividends Left on Deposit	53,767,508.30
Reserved for Dividends to Policyholders	137,845,377.00
Set aside for payment in 1947 to those policyholders eligible to receive them.	
Policy Claims Currently Outstanding	34,012,611.03
Claims in process of settlement, and estimated claims that have occurred but have not yet been reported to the Company.	
Other Policy Obligations	30,523,003.19
Including premiums received in advance, etc.	
Taxes Accrued	20,198,797.00
Including estimated amount of taxes payable in 1947 on the business of 1946.	
Contingency Reserve for Mortgage Loans	21,000,000.00
Miscellaneous Liabilities	26,994,539.16
TOTAL OBLIGATIONS	\$7,548,450,103.35

Thus, Assets exceed Obligations by \$496,982,280.85

This safety fund is made up of:

Special Surplus Funds	\$83,533,000.00
(including \$69,833,000.00 for possible loss or fluctuation in the value of investments)	
Unassigned Funds (Surplus)	\$413,449,280.85

NOTE:—Assets carried at \$386,528,629.53 in the above statement are deposited with various public officials under requirements of law or regulatory authority. Canadian business embraced in this statement is reported on the basis of par of exchange. In the Annual Statement filed with the Massachusetts Insurance Department, Policy Reserves Required by Law are \$6,891,481,278.02, and Miscellaneous Liabilities are \$26,872,931.16.

ASSETS WHICH ASSURE FULFILLMENT OF OBLIGATIONS

National Government Securities	\$4,244,055,186.17
U. S. Government	\$4,001,167,645.00
Canadian Government	242,887,541.17
Other Bonds	1,958,283,733.97
Provincial and Municipal	\$ 89,739,938.35
Railroad	530,654,827.57
Public Utility	631,841,742.55
Industrial and Miscellaneous	706,047,225.50
Stocks	106,662,750.00
All but \$1,533,700.00 are Preferred or Guaranteed.	
First Mortgage Loans on Real Estate	886,963,401.82
Farms	\$ 86,749,350.06
Other Property	800,214,051.76
Loans on Policies	335,308,794.10
Made to policyholders on the security of their policies.	
Real Estate (after decrease by adjustment of \$25,000,000 in the aggregate)	208,908,746.54
Housing projects and other real estate acquired for investment	\$122,850,596.70
Properties for Company use	34,885,954.04
Acquired in satisfaction of mortgage indebtedness (\$29,628,289.62 under contract of sale)	76,172,195.80
Cash and Bank Deposits	126,654,058.48
Premiums, Deferred and in Course of Collection, Net	118,268,923.09
Accrued Interest, Rents, etc.	60,326,790.03
TOTAL ASSETS TO MEET OBLIGATIONS	\$8,045,432,384.20

This fund, representing about 6½ percent of the obligations, serves as a cushion against possible unfavorable experience and gives extra assurance that all policy benefits will be paid in full as they fall due.

Metropolitan Life Insurance Company

(A MUTUAL COMPANY)

Frederick H. Ecker, CHAIRMAN OF THE BOARD Leroy A. Lincoln, PRES.
1 MADISON AVENUE, NEW YORK 10, N. Y.



METROPOLITAN LIFE INSURANCE CO.
1 Madison Avenue, New York 10, N. Y.

Gentlemen:

Please send me a copy of your Annual Report to Policyholders, "One of Metropolitan's Greatest Years—1946."

Name _____

Street _____

City _____

State _____

LOBO & WIJNBERGEN

Incorporating J. van Breukelen

Cables: LOWYCO 2 Tulpstraat
(opp. Amstel Hotel)

AMSTERDAM, HOLLAND

Import-agents (since 1927) solely American and British firms, automotive and connected fields, interested extending connections N. W. European and corresponding Colonial Territories, also other fields. Large import and export experience and especially directed activity provides for solving many a "RECONVERSION AND GUIDED ECONOMY" problem.



HOTEL VICTORIA

AMSTERDAM (HOLLAND)

FAMOUS FOR FRIENDLINESS

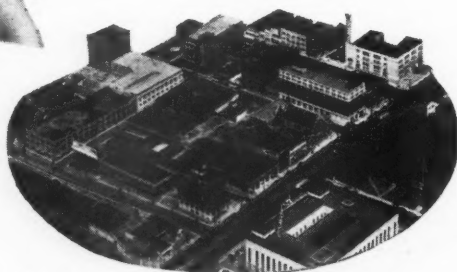
You guessed it! "AL" means—

"Amsterdam's Largest"

RESTAURANT OF NATIONAL DISTINCTION
AMERICAN BAR



I wonder—



Business pictures of local market conditions:

TOWN and AREA REPORTS...

...give you the unbiased territorial information you need when you are

- considering opening or discontinuing a branch
- comparing the performance of branches or sales representatives in several cities
- deciding whether or not to renew a lease.

The reports, made individually for you, concentrate on the local factors which bear directly on your problem—the number of customers, their purchases, the number of enterprises in your line, their growth and size, general business conditions and outlook for the area.

Depending upon your specifications, the reports may also include data on the employment situation, rent levels, property values, real estate and other taxes, and the desirability of particular store locations.

Town and area reports provide a clear picture of local conditions and assist you in planning wisely and profitably.

For further information about the service, consult the:

MARKETING AND RESEARCH DIVISION DUN & BRADSTREET, INC.

290 BROADWAY • NEW YORK 8 • NEW YORK
OR YOUR LOCAL DUN & BRADSTREET OFFICE

liver sales messages economically to the millions.

Some complain of too much style, too much variety, too many sizes, too many brands, too many packages. But people have freedom of choice. They may buy or not buy. Styles, products, and brands survive only if enough people want them.

This is not the time nor the place for a defense of the competitive system. Let us merely remind ourselves that the profit motive is the spark plug that for years has provided us with the highest standard of living and the greatest production record in history. The effect of free competition is preponderantly to keep costs and prices down. It should be obvious that if we tried to eliminate the so-called "wasteful" practices of competition we would have to eliminate the same powerful forces that result in improved products, better service, and lower costs. We would end with a completely managed economy.

Effects of Competition

Competition is our insurance that costs will be held down. Every smart manufacturer, wholesaler, and retailer is looking for ways to increase his profits by cutting distribution costs. He knows that if they get out of line his business will suffer. Some one else will be selling to his former customers for less.

When you think of the innovations in marketing that have been tried in an effort to lower distribution costs—mail order, door-to-door, self-service, installment credit, chain stores, consumer co-operatives, voluntary chains, super-markets, small shops, and big department stores; when you picture the transportation competition of railroads, trucks, ships, and airplanes; when you recall all the kinds of competitive advertising media such as newspapers, magazines, radio, posters, car cards, and mail; and the different advertising techniques and schemes, the sales quotas and different forms of compensation to stimulate salesmen, then you wonder if there is anything in the field of distribution that hasn't been tried. But no doubt there is, and competition will discover it in the eternal search for new economies.

It is a reassuring fact that thousands of men and women—economists, sales

managers, advertising managers, wholesalers, retailers, experts in research, and experts in market analysis—are working constantly to eliminate waste and most of them, for purely selfish reasons, would give their eye teeth to find ways to effect short-cuts or major reductions in distribution costs.

Costs Will Increase

During the war years distribution costs were relatively low. Both total sales volume and the size of the average transaction were larger, due principally to wartime government spending. Furthermore, many services were curtailed or eliminated.

Now business must resume its forward march to new markets. The war placed overwhelming importance on production. We are now unquestionably able to produce for an economy of abundance. From now on the success of our whole economy depends upon the success of the distribution factors.

But what about the machinery of distribution? More than half our war sales were to one customer—the government, and these by-passed the distributors. Sales organizations were largely depleted. Salesmen turned from selling to trying to keep customers pacified without giving them merchandise. Advertising was devoted largely to merely keeping names before the public. Selling not only grew soft—but often it became non-existent.

Sales machinery must be rebuilt. Order-takers must be converted into salesmen. Men and women must be selected, trained, and inspired to do the work. They must be organized to do more than has ever been done before.

Incidentally, this is the time to start such a program. The organization that has been trained well in advance of the competitive market will have a tremendous advantage when days of hard selling are upon us.

We shall delude ourselves if we do not realize that after the lush, postwar period in which accumulated demands are being satisfied, we will find it necessary or unavoidable to face an increase in percentage distribution costs.

Wage rates will advance in the field of distribution as they have in the field of production. But the opportunity to



**in
LESS TIME
at
LOWER COST**

Hand folding of monthly statements, form letters, advertising literature, etc., is expensive. It's a slow, time-consuming job . . . takes employees from their regular duties . . . and is seldom accurately done.

But . . . with a Davidson Folding Machine . . . one unskilled girl operator can do the entire job . . . accurately . . . in a fraction of the time . . . at a fraction of the cost.

That's why more and more business concerns are installing Davidsons . . . improving office efficiency . . . getting mailings out on time . . . and materially reducing costs.

Davidson Folding Machines are precision built . . . equipped with automatic feed . . . designed for fast, accurate folding . . . and years of trouble-free service. They're made in three models to meet the requirements of practically any business.

Do you know how much hand folding is costing you? A Davidson representative will gladly make an analysis of your costs and submit a recommendation . . . without obligation. In the meantime, we'll send you descriptive literature about Davidson Folding Machines. Just drop us a line.

DAVIDSON MANUFACTURING CORPORATION
1038-60 West Adams Street • Chicago 7, Illinois
Davidson Sales and Service Agencies are located in principal cities of the U. S., Canada, Mexico and foreign countries.

Davidson

FOLDING MACHINES

**IS
YOUR
CASH**

**LOCKED
UP**

**IN
INVENTORY?**

Let Douglas-Guardian explain how you can borrow on your inventory *without moving it off your premises*. Loans of \$10,000 to \$10,000,000—depending on the amount of merchandise on hand—can be arranged with banks or other lending agencies. Write today for booklet giving complete details.

DOUGLAS-GUARDIAN WAREHOUSE CORPORATION

50 Broad St. Garfield Building
New York 4, N.Y. or Los Angeles 14, Calif.

I'm interested in a bank loan on inventory. Please send me a copy of **PROFITS ON YOUR PREMISES**.

Name _____
Address _____

DR-4-47

increase the output of workers in the distribution field is less than in the field of production where mechanical improvements will be an important factor.

The factors underlying production and distribution are quite different. Production is a mechanized process. Simply by operating two or three shifts daily, a factory's output can be readily increased with a lowering of unit costs.

But in marketing we are dealing with people—their individual needs, whims, desires, and abilities to buy. If we doubled the size of our distributing organization we would not necessarily double the ability or inclination of people to purchase or consume. Through advertising and other means we must resort to informing, suggesting, and persuading.

Services, such as delivery, credit, and returned-goods privileges, which were curtailed during the war, are being resumed. The increasing influence of fashion will increase the importance of such expenses.

Eliminating Operating Wastes

Of course, in distribution, as in other operations, there are wastes in operating efficiency. Unit costs should be brought down wherever this is possible. The cost factors that influence the movement of goods from factory or farm to consumer usually have not been as accurately measured as those in the processes of production. Scientific controls, which have been so important in reducing production costs, are not yet as widely used in the processes of distribution. Undoubtedly more time and money have been spent to reduce production costs than in similar attempts to reduce distributing costs.

But, more and more sales planners are using the engineering approach—objective fact-finding, market analysis, experimentation, testing. In this field lies the chief hope of slowing down the percentage increase in distribution costs.

This means the adoption of more informative cost-accounting and more careful planning based on its results.

It means the elimination by each distributor of unprofitable accounts and territories and the concentration of effort on those that do, or could, yield a worthwhile return.

It means the elimination by each dis-



CARRY LOADS OF 10 TO 12 TONS PER PAIR

"Skid-Rol" Dollies. Heavy-duty. All-steel. For moving or shifting machinery, heavy objects, etc. Steel cleats bite into wood skids. Safer—faster. Size 18½"x10½"x4" high. Fill in below—

TECHTMANN INDUSTRIES—Milwaukee 1, Wis.
Send details re: "Skid-Rol" Dollies to:

DR

SALES PROMOTION CAMPAIGNS AND MERCHANDISING PLANS

Top results produced over 25 years for manufacturers, magazines, newspapers and advertising agencies . . . on fee basis for specific campaigns or annua. retainer. Postwar scramble to re-establish brands demands the most expert ability to be had for creating your sales promotion material . . . and merchandising plans to secure maximum volume from market potentials.

ROBT. E. JACKSON, SALES BUILDER
6319 No. Whipple St., Chicago 45, Ill.



- On or off in a second.
- Can be used over and over again.
- Longer life and stronger than elastic bands. ST-71

COLUMBIAN String Ties



Write for free samples
**UNITED STATES
ENVELOPE CO.**
Springfield 2,
Massachusetts

ARGENTINA

WE ARE INTERESTED IN REPRESENTING MANUFACTURERS OF C O 2 Fire Fighting Installations—Fire Fighting Trucks—Canvas—Industrial Hoses—Manila Ropes—Bracket Machines—Transport & Stowage Equipment and all kinds of Modern Machinery.

G. A. K. BRÜHL

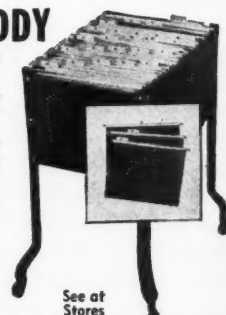
San Jose 335, Buenos Aires, Cable Address: "GEAKAB"

FILE CADDY

It's efficient!

Just right for keeping current correspondence, invoices, estimates; for sorting papers to be permanently filed. 25 steel-top, red fibre folders slide along side rails.

\$15.50 f.o.b. factory.
10% higher west of Rockies.



See at Stores

All steel, olive green finish. Equipped with casters. 27" high 13¼" wide, 18" deep.

AMBERG FILE & INDEX CO.
1614 Duane Blvd., Kankakee, Ill.
Filing Supplies • Albums • Decorative Catalog Covers

"Holland Calling"

The undermentioned Trade Representatives and Traders in Holland are interested in establishing business relations WITH YOU. Direct all correspondence to these concerns at addresses given. This is a paid advertisement.

ALHAMEX, Berkenrodenlaan 20, Amsterdam, Zuid 11. Cable: Alhamex, Amsterdam. Minerals, metals, chemicals, residues, semi-finished products.

N. V. BICKER & v. d. ROER, Sarphatijkade 4, Amsterdam. Importers and exporters of technical and chemical products.

BOOM-RUYGROK LTD., Printers and publishers, Harlem, Holland. Make first-class printing works, also for export, are at the same time publishers of many trade journals a.o. *De Auto*; *Vliegweld*; *Weekblad Voor de Vakgroep Smederij*; *Textiel & Mode*; *Elegance* (for the modern woman); *Figu* (cosmetic); *Blombollencultuur*. Advertising rates are sent on application.

VAN DEN BOS HANDELSCOMPAGNIE, 105, Parkstreet, The Hague (Holland). Export department offers foodstuffs and all special Dutch products. Import department asks for sole agencies foodstuffs.

N. V. BOTEMIJ, Weteringschans 83, Amsterdam. Cable Botomy Amsterdam. Manufacturer of the "Ever Yours" beauty products and *Jeune Fille* beauty products for girls. Specialized for export to all countries of the world. Sole agents wanted.

C. VAN DER BURG & ZONEN, Vlaardingen. Exporters of selected Dutch herrings all over the world. Agents wanted. Manufacturers of wooden barrels of any capacity and also of staves, headings and hoops. "CHEMPHAR" CHEMISCH PHARMACEUTISCHE HANDEL M.Y., N. V., 228 Keizersgracht, P. O. Box 657, Amsterdam-C. Importers and Manufacturers. Representatives of chemical and pharmaceutical products.

CIPROFLEX N. V., P. O. Box 931, Amsterdam. Metal and wooden lighting fixtures, electrical apparatus and material, parchment and bladder lampshades.

N. V. DAARNSHOUWER & CO'S HANDELSMAATSCHAPPIJ, Heerengracht 223-225, Amsterdam. General exporters to all parts of the world. New connections solicited.

JAN DON & CO., Vlaardingen. Cable address: Jadoco. Selected Holland herrings.

H. DEN DONKER, P. O. Box 274, Rotterdam. We want agency in raw and manufactured chemicals, also in gums, wax, rosins, etc.

DONOR TRADING COMP., P. O. Box 3901, ROTTERDAM. Importers of shooting, camping and sporting articles, gloves and leatherware, cutlery, toys, await offers from manufacturers.

J. C. VAN DORP & ZONEN, Vlaardingen, Holland. Cables: Vandorp Vetteoordskade Vlaardingen. Exporters of Holland-Herring since 1891. Agents wanted.

JAC. DEN DULK & ZONEN (Est. 1871), Scheveningen. Cable address: "Visch." Salt and smoked herrings. Finest quality.

ECONOMISCH ADVIESBUREAU F. HALVERSTAD, HEERENGRACHT 508, AMSTERDAM-C. CABLE ADDRESS: ECONABURO. INTERMEDIARY FOR GENERAL IMPORT AND EXPORT. SPECIALIZED FOR COMPENSATION TRANSACTIONS.

ADRIANUS VAN DEN EELAART, Schiedam (Holland), Korte Haven 25-29. Distillers and liquor manufacturers since 1697. Where not represented Importers and agents demanded.

"EUROPE" Intern. Manufacturing and Trading Co. Ltd., Amsterdam, Keizersgracht 285-287. Cable: Admistra Amsterdam. Manufacturers of hardware and costume dolls. Exporters of Dutch cigars and tobacco, gin and liquors, textiles and dyestuffs. Importers and agents demanded.

FORUM-BANK, N. V., Amsterdam, Heeregracht 444. Merchant bankers, members of the Amsterdam Stock Exchange.

DE GROOT, Potterstraat 4, Utrecht (Holland). Import and export of ladies' novelties.

HANDELSONDERNEMING BLIJDENSTREYN N.V. SINGEL 392, Amsterdam (Holland). Importers and agents in textiles, novelties, special piece goods, stockings, socks, underwear, shawls, baby goods, tablecovers, bathing goods, ladies' and children's dresses.

G. HOOGWERF, Vlaardingen (Holland). Cable address: Egooh. Salt herrings. Export to all countries since 1869.

E. HUNETS, Bonn (Holland). Representative for Holland of Francolor, Paris, and Establishment Kuhlmann, Paris (organic products).

N. V. IMPRIMEX INDUSTRIE-Producten Im- en Export, Amsterdam, Heeregracht 554a. Manufacturers representatives, importers and exporters of iron-metal and woodworking machines, technical goods, iron- and metal semi-products.

INKU, Heeregracht 503, Amsterdam. Manufacturer's agents. Export from Holland: Roofing of bituminized felt, paints and varnishes, phenolic glue. Affiliate: P. J. Veelo, exporters cigars, liquors, etc.

INTERNATIONALE HANDELSVEREENIGING, Amsterdam (Holland). Keizersgracht 431. Textiles of every description. Export. KALA, N.V. BUTTON WORKS, HEERENGRACHT 20, AMSTERDAM. BUTTONS AND BUCKLES.

KENNEMER HANDELSVENNOOTSCHAP SOOMERS & DE JONGE.

Nwe. Keizersgracht 58, Amsterdam. Soap, cosmetics, perfumery, toilet articles, etc.

KOELLRAU N. V., Gravenstraat 22, Amsterdam, Holland. Old established firm in Holland, interested in domestic and commercial machinery, refrigeration, washing machines, radio sets, records, etc.

K. KORNAAT'S HANDELSMAATSCHAPPIJ, Established 1775, Vlaardingen, (Holland). Export of salted and smoked herrings.

MELCHERS & SANDBERGEN, AND FRANS VAN MIERINSTRAT 99, Amsterdam (Holland). Cable address: Mesametaal. Importers and exporters non-ferro scrap metals, residues, ores, chemicals and allied products.

MEIREM & LA PORTE, N. V., Amsterdam. Technical office since 1870. General importers and exporters. Iron and steel, non-ferrous metals, technical goods.

MICHEL WASFIGUREN EN INSTALLATIE MAGAZIJNEN, Huidekoperstraat 25-27, Amsterdam (Holland). Manufacturers and exporters of high class display mannequins in hardened composition with inserted natural hair.

For publicity in Holland, three leading magazines: "Moeder & Kind", "Victorie", "Film & Theater." Publ. Cy. "De Internationale Pers," Heeregracht 545-549, Amsterdam-C.

DE MÜNCK & CO'S, Handelsmaatschappij, Amsterdam, Kloveniersburgwal 47. Cable: Muncomij. General exporters and importers.

V. S. OIMSTEDE, Paulus Potterstraat, Amsterdam. Importers of tool-machinery seeks agencies for lathes, milling-machines, shapers, automatic lathes, grinders. Buying on own account, exhibiting national Dutch fair March 1947.

"PENTO" COSMETIC, Gisterstraat 5-7, Amsterdam-C. Cable address: Pento. Manufacturers of all kinds of cosmetic products. Le: Toothpaste, shaving cream, powders, creams, lipsticks, lotions, brilliantine, haircream, shampoos.

VAN PERLSTEIN & ROEPER BOSCH, LTD., Heeregracht 440, Amsterdam, established 1873. Importers and representatives textiles every description, hardware, kitchenware, fancy goods, toilets, cosmetics, electric articles, tools, leather, crockery, glassware, plastics, furnishing lines, toys.

W. A. PESCH JR., Kelleweg 22, Rotterdam. Importers of fish meal, meat meal, vitamin oils, brewers' yeast, alfalfa, rice bran, pollards, cereals and by-products.

K. F. PETERS-CHEM. & PHARM. PRODUCTEN, Amsterdam. Cable address: Anorga. Are open for suitable products—as manufacturers' representatives—in the following lines: Chemicals (for technical use), plasticizers, solvents, etc.

J. POLAK'S ENGROSHANDEL, Kloveniersburgwal 19, Amsterdam. Importers of woollens, silks, shawls, novelties, ladies' and children's dresses.

RENO HANDELSMAATSCHAPPIJ N. V. (Reo Trading Co. Ltd.), Amsterdam, 33; Weteringschans. Importers of medical and surgical goods of all descriptions, electromedical and X-ray apparatus, glass bottles and laboratory glassware. Invites offers from U. S. A. and Canada.

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tributor of unprofitable products, unnecessary sizes, and more effort on those with large potential sales.

It means more careful selection of personnel, better training, and the elimination of those who can't pull their weight.

It means designing products and containers to more closely meet the wants of the buyer.

It means having the right number of warehouses and having them properly located.

It means, in some industries, greater decentralization.

It means the pre-testing of products, packages, advertising, and selling techniques.

It means, in brief, making improvements and trimming costs all along the line.

But if we are to maintain markets for our increased production we cannot start with the idea that "distribution costs too much."

This generality can become a dangerous concept. It takes management's eye off the target. More than that, it fixes it on the wrong target.

The Objectives

Our real target is larger and larger volume, better and better products, lower and lower prices.

Paradoxically, the way to lower the unit costs of distribution, as well as production, is sometimes by spending more. Very often if you promote your product harder you sell sufficient additional volume to reduce the unit cost of distribution.

Whether the cost of distribution is 41 per cent or 59 per cent of the consumer's dollar is not the fundamental question. Whether the price of the articles sold is \$1 or 75c. is much more important. If all the costs of production and distribution add up to a lower price to the consumer the percentage figures are unimportant.

What consumers want is better merchandise and better service at lower prices. These are the things that producers and distributors strive to supply in order to stay in business. The objectives of each party are the same and, so long as the ways of trade are kept free and open, competition and the profit incentive will in the long run see to it that distribution costs never get far out of line.

BIG BUSINESS

(Continued from page 19)

thinner coating to cover a like space of steel, and finally results in saving at least 40 per cent of the tin necessary in older processes.

It would take too long if one attempted to study all the knowledge brought together in a company to do this one job which is, of course, only one of thousands of similar things it is called upon to do. It requires men skilled in the knowledge of steel making, skilled in the knowledge of all kinds and types of electrical apparatus. It requires scientists who know mysterious things, such as waves that travel at the incredible speed of light and pass through seemingly impenetrable substances. All these skills and knowledges have to be co-ordinated into a harmonious whole so that they may work together and produce a result agreed upon as an abstract ideal before starting. Super-imposed on all of these functions must be the ability to sell this service so that the necessary money can be obtained to buy the materials, compensate labor, and pay taxes.

Plans must be laid for the future; ideas which promise best for new products sought out and explored; all to be done in such a way as to accomplish successfully the purpose of the large organization which is to beat its competitors and serve the public well enough to keep alive.

By way of further example, nothing but sheer magic enables an automobile company to collect steel and copper and oil and rubber and cotton and paint and gears and springs and meters and instruments—in themselves complicated beyond belief—with a squirt of air here and a dash of water there and produce, out of the jumble, a swanky automobile which even a fool may drive and which could carry one in comfort where a mule would hesitate to go. Only the magic of organization can do this.

The modern businesses that thrive so lustily have so perfectly satisfied the age in which they live that they have in many cases grown out of proportion to the rest of the world and, in growing, have killed off lesser organizations, even as a big tree draws away the sustenance of the earth from the smaller



Translation: * Prints postage on envelope † Seals flap same time

Quite acute, these Orientals

They catch on quick . . . to the advantages of printing postage stamps directly on the envelopes . . . compared to the disadvantages of buying paper stamps which must be stuck on the envelopes. Therein lies the outstanding efficiency and economy of a postage meter . . . obvious in any language! And sealing the envelope flap at the same time . . . makes mailing faster and easier in any office, large or small.

There are also other advantages . . . Postage is always available in the postage meter, can be printed as needed, in the exact amount needed, for any kind of mail . . . is printed on tape for parcel post . . . Postage is always protected in the meter, safe from theft, loss or misuse . . . and is automatically accounted for by the meter . . . The dated postmark, printed with the stamp, saves postmarking and canceling in the post office, helps metered mail make earlier planes and trains!

If you'd like to know how a postage meter can serve and save in your office, call the nearest Pitney-Bowes office . . . or write direct for an illustrated booklet.

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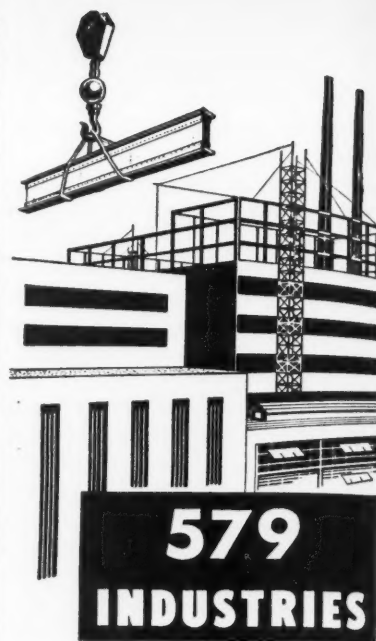
and weaker trees around its base. In other words, bigness not only dwarfs littleness by comparison but actually tends to make little things smaller. This seems to be the inevitable law of life and business cannot escape it any more than natural things can.

Small Businesses Protest

Big business in the vigor of its early youth and sturdy manhood took everything in its stride, voting itself a benefactor of the human race because everything it did was obviously eagerly taken by the public that demanded even more. Under such conditions it was perhaps natural that big business should overlook the growing hostility of those adversely affected by its growth. It was, perhaps, inevitable that as business got bigger the little organizations, being stifled or completely ruined by big business, should raise their voices in protest until the protest became an angry chorus that completely drowned out the sales talk of big business. The public continued to support big business by buying and using its products. At the same time the inconsistent public condemned it for the injury being done to the small competitor. In the public press little business is protected. Big business, which is only little business grown up, is condemned.

A good example of this inconsistency of the public attitude is to be found in the growth of chain grocery stores that now blanket the country. These chain stores did not grow by virtue of some early advantage which enabled them to spread over the country. They grew because the housewife preferred their services and prices. In other words, they served her better than the little ones; therefore they got her trade. Notwithstanding this obvious public preference, the representative of the people went to their legislatures and passed drastic law after drastic law with a view of curbing the growth of these "big business" retail organizations which the housewife, by her own efforts, was building into greater and greater organizations.

This is not an attempt to defend the effect of bigness on littleness. It is an effort to state clearly, and perhaps too briefly, what really happened and why. As we have said, there is no guarantee that a business will succeed because its



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579 new enterprises were established, or were in the process of being established, in South Carolina during 1945 and 1946—a hard-headed testimonial to the many advantages which the State offers both business and industry.

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South Carolina

WHERE RESOURCES AND MARKETS MEET

founder has faith in it. The bankruptcy courts are full of failures and few of them are caused by the competition of big business, although some undoubtedly are. Most of them are due to incompetent management—failure to do many of the absolutely necessary things that must be done if a business organization is to thrive and prosper or, in other words, live.

As a result of the rising chorus of protests from small business, the public attention was attracted to the evils of big business, and its good qualities, taken as a matter of course, were overlooked. It is the same old story of the street fight where the husky fighter, well able to take care of himself, does not have the sympathy of the crowd, even though the weaker man may be the aggressor.

Study the Problem

College professors and economists took up the study of big business and found almost unanimously that it was evil. This is a literally true statement. Big business, that had grown big because it served the public well, was found by them to be an economic and social evil. We may search the pages of the books of our schools and colleges in vain for any defense of big business or anything that approaches an intelligent understanding of what big business is.

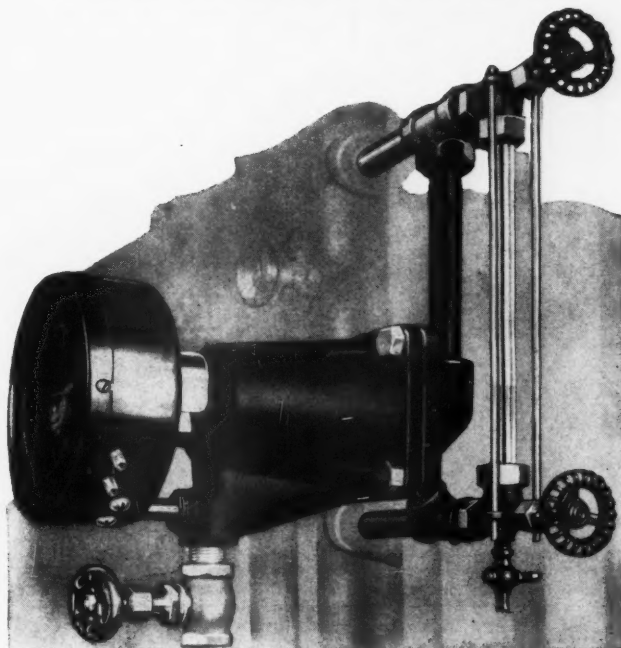
Life contains no greater paradox than the popular antagonism to big business. The average man made business big. Big business caters to his tastes; makes the cigarettes he wants; carries him where he wants to go; carries his burdens; and yet the recipient of all these gifts fights the giver, big business, at every turn.

Even though the Sequoias have survived thousands of years of storm and stress, if the climate became definitely adverse, they would die. So it is with big business. It has thrived and is thriving; but if the social climate becomes adverse enough, it too may die. Big business is a natural growth. Big business cannot be produced by executive order and, in a very true sense, the service of big business is not possible from a bureaucratic source. The attendant of the Standard Oil Company may wipe off your windshield, but would a government official?

Let us now explore the fundamental

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characteristics of a big organization. It is the best example of co-operation to be found among men. An organization brings together men of different talents to contribute something in which each is particularly qualified to the efforts of the whole. The specially trained scientist who knows all about the metallurgy of tungsten would have little value except in an organization that makes use of rare metals. It is so precious a metal that it is used as little as possible. In this way the tungsten expert joins with different types and kinds of people to make some practical product which needs only a little tungsten.

Skilled People Unit

The big organization enables a group of skilled people to unite and contribute their combined knowledge to a common cause. This multiplies the chances of success. This speeds up the process of invention and discovery and undoubtedly explains in part the remarkable progress made in America by and through business organizations. For America, we must remember, will be known in history as the place where big business first flourished. Whatever we are as a people, business has much to do with it.

During the growth of big business our economy has changed from a food and sustenance basis to a luxury basis. Once 80 per cent of the population was engaged in producing food. Now only 22 per cent is required to produce food. Big business was a governing factor in making this change. Meanwhile, man no longer worked from sun to sun and woman's work was largely done.

As men learned to make things in factories, they also learned to do them more swiftly and with less effort. Machine tools of a bewildering variety were installed to do the labor which men had formerly done. The final result was that less labor was required to do a standard job. Consequently, the prices of products went down or better products were furnished at the same price.

Out of this grouping together of skilled men has grown the great research laboratories of big business from which improvements and new ideas flow daily. It is significant that these laboratories of the modern world are

to be found in business organizations and in the universities. Such research is a continuing blessing to the human race and, in the hour of national need, from these research laboratories came the necessary knowledge to arm our soldiers and sailors with superior weapons for victory. Tanks with guns that held the target regardless of motion; radar that saw in the dark and pointed guns at flying objects; electric torpedoes that made no noise and left no wake; and, of course, airplanes, submarines, ships, ordnance, and everything else that we used in war are examples.

Advantages Felt by Many

The big organization is a product of a few conspicuously superior people. In the old days a superior man was limited in his efforts. He had the better barns, the better cattle, the better farm. His family was better clothed. He was able to take care of the weak and was generally the leader of his community. But he stopped there. There was no way in which his ability could be multiplied beyond the borders of the parish. Not so with ability in the big organization. Here, the able administrator finds ways and means to multiply his efforts by the efforts of thousands who are able to help him. Henry Ford, General Eisenhower, or other leaders are examples of able men, moving in fields of vast scope, creating the first low-priced automobile and doing innumerable other things to advance human affairs.

Only big business has sufficient demand to justify the use of mass production methods. This well-known modern manufacturing technique is the secret of low-cost production resulting in low-priced luxuries within the reach of the common man. All modern conveniences, from the automobile to the refrigerator and from the radio to the X-ray, are extremely intricate machines. If they were not built under mass production methods, they would cost ten or a hundred times more than they do. Mass production methods, as applied to the manufacture of machines and material for war, have attracted worldwide attention in recent years. Under the magic of this method, America not only equipped her own armies within the space of a few years but furnished surplus materials in huge quantities for



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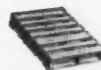
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her Allies. For the time being, at least, big business had again served its world well.

As goods produced by mass production increased, the world helped itself freely from the supply of cheap products, little realizing that nearly everyone would be working shortly in the factories producing the goods it was buying. So, as time went on, big business was not only supplying most of the products needed by the world, but also most of the employment. Perhaps this is the seat of the distemper of our day.

National Unity Aided

Big organizations assist national unity. It is good that the people in California can buy and use the same things as the people in New York. It is good that the people in Florida can buy and use the same things as the people in Michigan. There may be no proof of this, but I hazard the conjecture that without national business organizations we would not be a nation extending from the Atlantic to the Pacific. We would be provincial people, quarreling among ourselves.

Big business is law-abiding. It does not violate the law with impunity. Sweatshops are seldom found under the cloak of big business. Big business is sanitary. Big business is a good place to work and young men seek employment with a large organization.

Big business is humanitarian. It started pensions long before the national government discovered that the voters needed protection in their old age. Big business has long carried life insurance for employees to assuage the sorrow and grief that follows death. Big business has developed safety to a point far beyond anything known when all business was small.

But, since big business is big, it attracts attention. Since it is successful, it attracts envy. Since it is necessary, it promotes fear. Since it hires most of us, we fear unemployment and blame big business. There are more small trees than there are big trees and it is natural for the little tree to feel dwarfed by the big one. Society threatens to cut down big business. Before swinging the ax, it would be wise to look around and make certain what will grow in its place after it is gone.

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